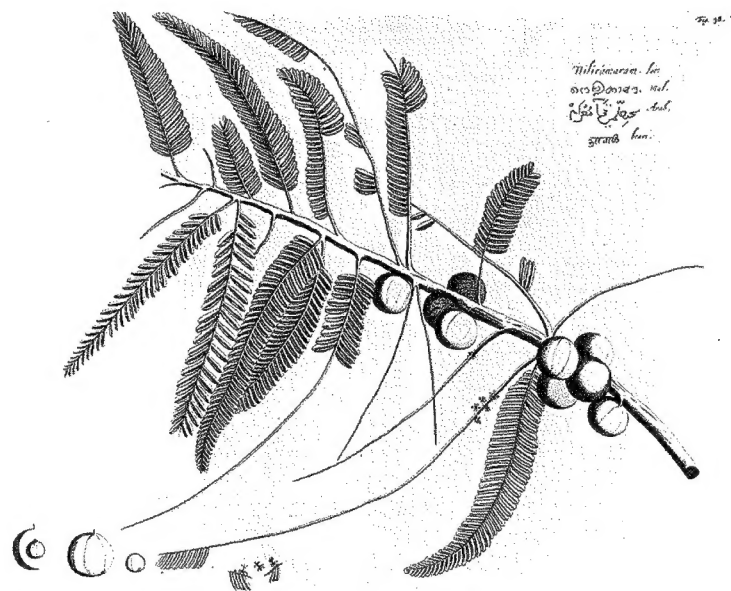


A History
of Indian Medical
Literature

VOLUME II A



Emblica officinalis Gaertn.
Āmalakī
Nellikka

G. Jan Meulenbeld

A History of Indian Medical Literature

VOLUME IIA TEXT

EGBERT FORSTEN · GRONINGEN

2000

Sep/Ae
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Cover design: Françoise Berserik
Frontispice: Hortus Indicus Malabaricus, Vol. 1 (1678), tab. 38
by courtesy of the University Library Groningen
Typesetting and layout: Adriaensen & Barkhuis

This book was printed with financial support from the
Netherlands Organization for Scientific Research (NWO)
and the J. Gonda Foundation, Amsterdam

Publication of this work was made possible through the support of the editors of
Sir Henry Wellcome Asian Series, including Prof. Dr Paul Unschuld, Dr L.I. Conrad,
Dr D. Wujastyk, and Prof. R.E. Emmerick, and their institutions,
the Institute für Geschichte der Medizin, Ludwig Maximilians Universität, München,
the University of Hamburg, and the Wellcome Institute for the History of Medicine,
London. Marika Antoniw, Anne van der Spelt, Sue Hordijkeno, and Mohsina Somji
of the Wellcome Institute are especially thanked for their contribution to creating
the camera-ready copy of the book.

ISBN 90 6980 124 8



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Information and documentation
Paper for documents-requirements for permanence*

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Contents

PART 6	Some important authors and works	
1	Bower Manuscript	1
2	Bhelasamhitā	13
3	Kāśyapasaṃhitā	25
4	Hārītasamhitā	42
5	Mādhava	61
6	Vṛnda	78
7	Cakrapāṇidatta	86
PART 7	Authors and works from A.D. 600–1500	115
1	Authors and works from the period A.D. 600–1000	117
2	Authors and works from the period A.D. 1000–1500	156
PART 8	Authors and works from the 16th to the 20th centuries	237
1	Sixteenth-century authors and works	239
2	Seventeenth-century authors and works	298
3	Eighteenth-century authors and works	329
4	Nineteenth-century authors and works	353
5	Twentieth-century authors and works	375
PART 9	Miscellanea	413
1	Works on pākāśāstra	415
2	Works on nāḍīśāstra	421
3	Various authors	434
4	Various anonymous works	492
5	Authors and works from Sri Lanka	547
6	Authors and works on veterinary medicine	557
PART 10	Works on rasaśāstra and ratnaśāstra	581
1	Ānandakanda	583
2	Āyurvedaprakāśa	593
3	Gorakṣasaṃhitā	602
4	Kākacaṇḍeśvarīmatatantra to Rasahīdayatantra	608

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5	<i>Rasajalanidhi</i>	623
6	<i>Rasakāmadhenu</i> to <i>Rasāmṛta</i>	629
7	<i>Rasapaddhati</i> to <i>Rasaratnāṭīkā</i>	642
8	<i>Rasaratnākara</i>	653
9	<i>Rasaratnasamuccaya</i>	666
10	<i>Rasāṇḍava</i> and <i>Rasāṇḍavakalpa</i>	675
11	<i>Rasasaṃketakalikā</i> to <i>Rasendracūḍāmaṇi</i>	688
12	<i>Rasendramaṅgala</i> to <i>Rasopaniṣad</i>	714
13	Various works on <i>rasaśāstra</i> and <i>ratnaśāstra</i>	739
APPENDICES		789
1	Authorities associated with formulae	791
2	References to medicine in non-medical literature	818
ADDENDA ET CORRIGENDA & REPRINTS		833
Addenda et corrigenda		835
Reprints		841

Part 6

Some important authors and works

Chapter 1

Bower Manuscript

The *Bower Manuscript* is named after H. Bower who, being then a lieutenant, obtained it, early in the year 1890, in Kucā from a local inhabitant during a confidential mission from the Government of India. Kucā¹ is the name of one of the principal oases and settlements of Eastern Turkestan (part of China), on the ancient great caravan route to China. The MS was found by native treasure-seekers in a stūpa close to the Ming-Öi (the "Thousand Houses", a system of rock-cut grottos with Buddhist shrines)² of Qum Turā, about 13 (or 16) miles from Kucā, in February 1890. On his return to India, Lieutenant Bower took the MS to Simla, whence it was forwarded to Colonel J. Waterhouse, who was then the President of the Asiatic Society of Bengal. Colonel Waterhouse exhibited the MS at the monthly meeting of the Society on November 5, 1890, when also a note from Lieutenant Bower was read, explaining the circumstances of the discovery. After the meeting some attempts were made to decipher the MS, but they proved unsuccessful.³ However, a German Indologist, G. Bühler, succeeded in reading and translating two leaves of the MS,⁴ reproduced in the form of heliogravures in the Proceedings of the Asiatic Society of Bengal.⁵ Immediately after his return to India in February 1891, A.F.R. Hoernle began to study the MS.⁶ At the meeting of the Society in April 1891, he was able to communicate the first decipherment.⁷ The Government of India sanctioned, in 1892, Hoernle's proposal to prepare a complete edition of the text, illustrated with facsimile plates, and accompanied by an annotated English translation. The first part of the edition appeared in 1893, the second part (in two fasciculi) in 1894-95, and the remaining parts in 1897. After an interruption of several years, the Sanskrit Index was published in 1908, and a revised translation of the medical portions (I, II, and III) in 1909; the Introduction appeared in 1912.⁸

The Manuscript⁹

The term 'Bower Manuscript' is not strictly correct, since it is, as to size, a combination of two manuscripts, a larger and a smaller. The larger manuscript is a complex of six smaller manuscripts which are separately paginated. The Bower Manuscript is therefore, in reality, a collection of seven distinct manuscripts, indicated as parts I to VII in Hoernle's edition.

The manuscript is written on fifty-one birch bark leaves of an oblong shape, in the form of those of an Indian pothī. The birch bark of the large portion of the manuscript is of a quality much inferior to that of the smaller portion. The hole for the passage of the binding string is placed about the middle of the left half of the leaves. This placement

of the string hole and the oblong form of the leaves point to an imitation of palm leaf pothīs from Southern India by the scribes of Kuṇḍa.¹⁰

The seven parts of the manuscript are written in an essentially identical script, the Gupta script, which prevailed in Northern India from the fourth to the sixth centuries A.D. Some graphic peculiarities of the Bower MS indicate, according to Hoernle, that it was written at some time within the fourth century A.D.¹¹ Distinctive characters of the script used enabled Hoernle to distinguish four different scribes,¹² who wrote parts I–III, part IV, parts V and VII, and part VI respectively. He also arrived at the conclusion that the writers of parts I–III and V–VII were natives of India who had migrated to Kuṇḍa. To judge from the style of writing, the scribe of parts I–III originally came from the northern, the two scribes of parts V–VII from the southern part of the northern area of the Indian Gupta script. The writer of part IV may have been a native of Eastern Turkestan. All four writers must have been Buddhist monks, residing in a monastery near Kuṇḍa.

The ultimate owner of the whole series of manuscripts, whose name appears to have been Yaśomitra,¹³ must have held a prominent position in that monastery, for the bundle of manuscripts was contained in the relic chamber of the memorial stūpa built in his honour.¹⁴

Language

The language in which the treatises of the Bower MS are written is a kind of mixed Sanskrit, i.e., a mixture of current literary Sanskrit and a Sanskrit with a varying proportion of prakritisms. The influence of Prakrit is far more pronounced in the more popular treatises on divination and incantation in parts IV–VII than in the more scientific medical treatises of parts I–III.¹⁵

Contents

Parts I to III, the three medical treatises of the collection, comprise a total of 1,323 verses and some prose;¹⁶ almost all the stanzas are written in three metres, the śloka, tri-ṣṭubh, and āryā; the śloka predominates, taking up about seventy percent of the whole. The total number of different metres is twenty-three;¹⁷ part I, in proportion to its extent, contains an extraordinarily large number, not less than nineteen, distributed over 132 verses; in part II there are nine metres to 1,119 verses, and in part III four metres to seventy-two verses. It is evident from this familiarity with metrical writing that the author of the three medical treatises was well versed in Sanskrit composition. Although the substance of part II, which is a compilation, is not his own original composition, certain portions of it may well be his own contribution, not only the ten introductory verses, but also a number of scattered stanzas.¹⁸ In contrast with the treatise in part II, the treatises in parts I and III do not consist of compilations from earlier sources, but are rather original compositions.

The author of parts IV–VII was not conversant with scholarly Sanskrit; these treatises are written in a mixed type of language. A considerable portion is in prose, and

whatever is in metrical form, is entirely in the easy śloka metre. The surviving fragment of part VII is entirely in prose; the only portion of part VI that is metrical is the charm in seventeen verses. Part V, on the other hand, is entirely in verse, and so is part IV, with the exception of its five introductory lines, which are in prose.

Part I opens with a flowery description of the Himālayas, where a group of munis reside, interested in the names and properties of medicinal plants.¹⁹ Mentioned by name are the following sages: Ātreya, Hārta,²⁰ Parāśara, Bhela, Garga, Śāmbavya,²¹ Suśruta, Vasiṣṭha, Karāla, and Kāpya (7–8). Suśruta, whose curiosity is aroused by a particular plant, approaches muni Kāśirāja,²² enquiring about the nature of this plant. Kāśirāja, granting his request, tells him about the origin of the plant, which proves to be garlic (laṣuna), its properties and uses (9–43). Kāśirāja's exposition on the subject is called the laṣunakalpa, as taught by the ancient sages.

A small tract on miscellaneous subjects follows. It contains verses on the digestive fire (agni; 44–51),²³ some rasāyana formulae (52–54), technical rules about the proportions of the ingredients of compound medicines (55–59), a vājīkaraṇa formula (60), and a rasāyana recipe attributed to Agastī (61–68).

Next come sections devoted to eye lotions (āścyotana; 68–86), face plasters (mukhalepa or vadanaprālepa; 87–105), collyria and pastes for the eyelids (aṅjana, viḍālaka;²⁴ 106–111), remedies against baldness and grey hair (khālitya and palita; 112–120), and recipes against cough, especially cough caused by deranged vāta (121–132).

Part II, which opens with a salutation addressed to the Tathāgatas, contains, as stated by the author, the *Nāvanīṭaka*,²⁵ a standard manual (siddhasaṃkarṣa), containing the foremost formulae of the great sages, made up by them of old (1–2). It was originally divided into sixteen chapters (adhyāya), the headings of which are enumerated in the introductory verses (4–9). The introduction ends with the recommendation not to transmit the *Nāvanīṭaka* to anyone without a son, a brother or a disciple.

Chapter one (11–107; on cūrṇayogas according to the introduction and the colophon) contains recipes for powders (cūrṇa), linctuses (leha) and pills (guḍikā); chapter two (108–260) deals with medicated ghees (ghṛta), and chapter three (261–403) with medicated oils (taila).

The contents of chapter four (miśraṅka; 404–617) are of a miscellaneous nature: two recipes against vātarakta (404–405), four recipes against āmāśāra (406–412), four recipes for mahāsaṃgrāhika preparations²⁶ (413–417), a formula for a styptic (sthāpana) to be employed in haemorrhagic conditions (raktapitta) and abortions (pracyutagarbha) (418–425), four formulae against pravāhikā (426–430), twenty formulae against cough (kāsa) (431–468), five formulae against hiccup (hikkā) (469–473), eight formulae against cough (474–483), two formulae against a wide range of diseases (484–494), six formulae against fevers (494–505), two formulae against various disorders (505–508), five formulae²⁷ against diseases of the head (śirṣaroga) (508–521), three formulae against coryza (pratiśyāya) (522–524), four formulae against toothache (dantaśūla) (525–531), six formulae against diseases of the ears (karṇaśūla) (532–542), formulae against some skin diseases (542–569), four

formulae against sidhma (569–574), seven formulae against strangury (mūtrakrocchra) (575–584), a formula against epistaxis (584), four formulae against inflammatory swelling (śoṭha) (585–592), five formulae against vomiting (chardi) (593–597), three formulae against morbid thirst (trṣṇā) (598–602), six formulae against urinary disorders (prameha) (603–608), four formulae against erysipelas (visarpa) (608–613), and three formulae against morbid pallor and jaundice (pāṇḍu and kāmālā) (614–617).

Chapter five (618–648) contains formulae for enemas (basti),²⁸ and chapter six (715–784) rasāyana formulae. Chapter seven (785–813) is about gruels (yavāgū). Chapter eight (814–817) is concerned with aphrodisiacs (vṛṣya), chapter nine (848–890) with collyria (añjana), and chapter ten (891–916) with hair dyes (keśārāga).²⁹

Chapters eleven (917–949), ten (950–967), and eleven (968–976)³⁰ describe the kalpas of haritakī, śilājatu, and citraka.

Chapter fourteen (1010–1119), which is incomplete, is about the treatment of children's diseases (kumārābhrtya). Chapters fifteen and sixteen, missing in the MS, were, according to the table of contents at the beginning of part II, about the treatment of barrenness (vandhyāciksita) and disorders in pregnant and nursing women (subhagāciksita).

Part III is a fragment of a formulary, the contents of which correspond to chapters one to three of part II. It contains formulae arranged according to the type of preparation, but this arrangement is inconsistent in the preserved portion. The preparations are mixed up: oils (1–4; 5–9; 10–14; 36–53), a powder (15–19), linctuses (20–24; 61–62), a ghee (25–36), liniments (lepa; 54; 55–56; 65), boluses (modaka; 57–60), and pills (63–64; 66–72).

Parts IV and V contain two short manuals of Pāśakakevalī, or cubomancy, i.e., the art of foretelling a person's future by means of the cast of dice. Part IV is a practically complete treatise on this art, while the manual in part V, quite independent of that in part IV, is very fragmentary.

Parts VI and VII contain two different portions of the same text, the *Mahāmāyūrī Vidyārājñī*, a Buddhist dhāraṇī that protects against snake-bite and other evils.³¹

Medical authorities mentioned in parts I–III are: Agastī,³² Agastya,³³ the Aśvins,³⁴ Ātreya,³⁵ Bhela,³⁶ Brahmā,³⁷ Brhaspati,³⁸ Cyavana,³⁹ Dhanvantari,⁴⁰ Garga,⁴¹ Hārīta,⁴² Janakeśvara,⁴³ Jīvaka,⁴⁴ Kāṅkāyana,⁴⁵ Kāpya,⁴⁶ Karāla,⁴⁷ Kāśirāja,⁴⁸ Kāśyapa,⁴⁹ Keśava,⁵⁰

Mānibhadra,⁵¹ Mārkaṇḍeya,⁵² Nārāyaṇa,⁵³ Nimi,⁵⁴ Parāśara,⁵⁵ Śaiveśvara,⁵⁶ Śakra,⁵⁷ Śāmbavya,⁵⁸ Suprabha,⁵⁹ Suśruta,⁶⁰ Svayambhū,⁶¹ Uśanas,⁶² Vāḍvali,⁶³ Vāsava,⁶⁴ Vasiṣṭha,⁶⁵ and Viśvāmitra.⁶⁶

Hoernle's edition of the Bower MS is extensively annotated. A large part of the notes to parts I–III is devoted to parallels of the formulae in other treatises and the search for possible sources. P. Cordier contributed to these investigations and some important additions to Hoernle's discoveries are owed to his intimate knowledge of the medical literature.⁶⁷ J. Jolly⁶⁸ also added parallels to Hoernle's early annotated translation.

Twelve passages are found in the *Bhelasamhitā*,⁶⁹ three of which only are explicitly attributed to Bhela. These twelve passages, containing recipes, are:⁷⁰ (1) II.43–55 (ayorājñiyacūrṇa) = Bhela Ci.17.33–45 (ayorājñiya); (2) 165–169a (rasāyanikaghrta) = Ci.4.34cd–38ab (rasāyanīyasarpis); (3) 202–203 (daśāṅgaghrta) = Ci.5.17–19 (daśāṅgaghrta); (4) 329–330a (sahacarataila) = Ci.24.32a–33 (sahacarataila);⁷¹ (5) 337–343 (madhuyaṣṭikataila) is closely related to Ci.4.79–90 (śatapākamadhukataila); (6) 407–408 (a formula against āmāṣāra) = Ci.10.12–13; (7) 409–410 (idem) = Ci.10.6–7; (8) 411–412 (idem) = Ci.10.8–9; (9) 474–479 (a recipe against cough) = Ci.20.26cd–32 (475 is more distantly related to Ci.20.27cd–28); (10) 534b–537a (a recipe against kārṇāśūla) = Ci.21.53–55; (11) 642–644 (tailādyabasti) is related to Si.8.60–62; (12) 803–804, a mantra to be recited after taking the bhelī yavāgū (802), is found at Bhela Sū.7.16–17, where it is not connected with any gruel, but with general rules for the preservation of health.⁷²

It may well be that more recipes of the Bower MS would prove to derive from Bhela, if it were possible to consult a complete MS of the *Bhelasamhitā*. Three recipes of the Bower MS, absent from the Tanjore MS of the *Bhelasamhitā*, are attributed to Bhela in Candrāta's *Yogaratasamuccaya*:⁷³ II.280–286 (balātaila), 399–401 (gaṇḍa-mālāyoga), and 1059–1060 (lākṣādisarpis).

A considerable number of formulae from parts I–III of the Bower MS form part of the *Carakasamhitā*, although Caraka is never mentioned, nor Agniveśa. These formulae are:⁷⁴ (1) II.11–13 (tālīśakacūrṇa) = Ca.Ci.8.145–147 (tālīśādyacūrṇa); (2) 14–17 (śāḍavacūrṇa) = Ci.8.141–144 (yavānīśāḍava); (3) 24a = Ci.5.92cd; (4) 25–26 (vardhamānakacūrṇa) = Ci.8.103–104; (5) 29–34 (mātuluṅgagutikā) = Ci.5.79–84 (hīṅgvādicūrṇaṃ gutikā ca); (6) 133–136 (tiktaghrta) = Ci.7.140–143 (tiktaghrta); (7) 137–143 (mahātiktaghrta) = Ci.7.144–150 (mahātiktaghrta); (8) 150–151 (śatpalaghrta) = Ci.5.147–148 (kṣīraśatpalaghrta); (9) 152 (tryūṣaṇaghrta) = about the same as Ci.5.65cd–66ab (tryūṣaṇādighrta); (10) 153–154 (vāsāghrta) is related to Ci.5.126–127 (vāsāghrta); (11) 155–157 (cāṅgerīghrta) = Ci.14.110–112; (12) 169–176 (śaramūlīyaghrta) = Ci.21.24cd–33ab (br̥mhaṇī-gutikā); (13) 188–200 (cyavanaprāśāghrta) = Ci.11.62–74 (cyavanaprāśa); (14) 383–385 (jvaraharānuvāsanaṭaila) = Ci.3.250–251; (15) 386–389 (anuvāsanaṭaila) = Ci.14.131–134; (16) 460–462 = Ci.5.123–125 (drākṣādyaghrta); (17) 484–490 (prasthavireka) is related to Ci.5.154–160 (dantīharitakī); (18) 491–493 (madhvāsava) = Ci.6.41–44 (madhvāsava); (19) 494–495a = Ci.3.206–207ab; (20) 496b–499a = Ci.3.200cd–203ab; (21) 603 (pramehaprasāmanayoga) = Ci.6.26; (22) 645–649 (picchābasti), a recipe found in Ci.10, according to Hoernle, but absent there;⁷⁵ (23) 742–743 = Ci.13.30–31 (medhyarasāyana); (24) 745–748 (pippalī-prayoga) = Ci.13.32–35 (pippalīrasāyana); (25) 749–752 (dvitīyapippalīprayoga) = Ci.13.36–40; (26) 819 = Ci.23.18 (vṛṣya śatāvarīghrta); (27 and 28) 844b–846a = Ci.21.46–47 (vṛṣyamāṃsa and vṛṣyamāṣayoga); (29) 957–967a (śilājatukalpa) = Ci.13.48–65 (śilājaturasāyana).

Hoernle claimed⁷⁶ that parallels of six formulae from the *Nāvanītika* occur in the

Suśrutasaṃhitā.⁷⁷ *Nāvanīṭaka* 407–412, a series of prescriptions against āmātīsāra, also found in the *Bhelasamhitā*, is, in his view, based on Su.U.40.34cd–46, a long prescription on the treatment of āmātīsāra, consisting of twenty options and a single directive statement at the end. He argued that both the *Bhelasamhitā* and the *Nāvanīṭaka* have drawn upon the Uttaratāntra of the *Suśrutasaṃhitā* in their verses on the therapy of the disorder. His assertion on this point seems arbitrary; the textual disagreements plead against it, as well as the chronological position of the Uttaratāntra.⁷⁸

Hoernle was also convinced⁷⁹ that three aphrodisiac formulae (829–830a; 833–835a) corresponded to some verses from the Cikitsāsthāna of the *Suśrutasaṃhitā* (from Ci.26.27cd–34), but, in this case too, the resemblances are superficial and not convincing.⁸⁰

P. Cordier⁸¹ advanced that *Nāvanīṭaka* 188–200 (the formula of cyavanaprāśaghrī) goes back to Agniśeṣa, 277–279 (the second formula of balātāila) to Hārīta, 251–257 (the formula of bindughṛta, attributed to the Aśvins) to Kṛṣṇātreya,⁸² and III.37–52 (the formula of siddhārthakataila, attributed to Nārāyaṇa) to Śālihotra. The formula of sūkṣmelāvardhamānaka (*Nāvanīṭaka* 64–65) is, according to P. Cordier, found in chapter two of the *Bṛhadvidyāprasāra*, and twenty-eight verses are said to occur in the *Kalyāṇasaṃgraha*.

In spite of Hoernle's efforts in tracing the formulae of the *Nāvanīṭaka* in other medical works,⁸³ many of them remain unidentified.⁸⁴

Some recipes from the *Nāvanīṭaka* form part of Cakrapānidatta's *Cikitsāsaṃgraha*, as indicated by Niścala.⁸⁵

One formula is found in Niścala's *Ratnaprabhā*.⁸⁶

A *Nāvanīṭaka* is quoted by Anantakumāra,⁸⁷ Candrāta,⁸⁸ Niścalakara,⁸⁹ and Śivādāsena.⁹⁰ A *Nāvanīṭakasamhitā* is one of the sources of the *Rasayogasāgara*.

Parts IV and V of the Bower MS have no relevance to medicine, being works on fortune-telling, a subject belonging to the province of jyotiṣa.⁹¹ Hoernle believed it to be probable that part V is one of the numerous recensions of the work on Pāśakakevalī, the divination by dice, ascribed to the ancient sage Garga,⁹² who is known as an authority on jyotiṣa.

Parts VI and VII contain two portions of the *Mahāmāyūrī Vidyārājñī*,⁹³ a well-known Buddhist charm (dhāraṇī). Part VI opens with a story about the Buddha who gives the *Mahāmāyūrī* spell to Ānanda in order to save the life of the young bhikṣu Svāti who was bitten by a snake.⁹⁴ The *Mahāmāyūrī* forms part of the *Pañcarakṣā*, a collection of five dhāraṇīs.⁹⁵ The version in the *Pañcarakṣā* is much longer than the earlier one, represented by the portions preserved in parts VI and VII of the Bower MS. The expanded version appears to have developed in the course of the fifth or sixth centuries A.D. Three of the six translations in the Chinese *Tripitaka*⁹⁶ are based on the expanded recension, while the three others show a more primitive form. The latter three belong to the fourth century A.D. Originally, the *Mahāmāyūrī* seems to have been a separate work, independent of the *Pañcarakṣā*.⁹⁷

The *Mahāmāyūrī* is mentioned in Vāgbhaṭa's *Aṣṭāṅgasamgraha*⁹⁸ and Soḍhala's *Gadanigraha*.⁹⁹ It is also referred to in Bāṇa's *Harṣacarita*, where the author says that it was recited when Prabhākaravardhana, Harṣa's father, was dying.¹⁰⁰

Special features

The description in part I of the assembly of sages in the Himālayas shows resemblances with the way in which the *Carakasamhitā* begins, but the composition of the group is different and the divine origin of āyurveda is not mentioned. Remarkable is the rôle played by Suśruta and his teacher Kāśirāja in the verses introducing the laṣunakalpa.¹⁰¹

A noteworthy feature of part I is this laṣunakalpa,¹⁰² which occurs separately from the three kalpas in part II. Kalpas of the type found in the Bower MS constitute an essential part of Sanskrit medical lore. They usually describe the mythical origin of a particular medicinal plant, its names, properties, actions, and a variety of recipes in which the plant is an important ingredient. The laṣunakalpa of the Bower MS has parallels in other medical treatises, for example the *Aṣṭāṅgharḍayasamhitā* (U.39.111–129), *Aṣṭāṅgasamgraha* (U.49.161–213), *Kāśyapasamhitā* (Kalpasthāna, laṣunakalpādhyāya), and *Hārītasamhitā* (Kalpa 4).¹⁰³ The stories about the origin of garlic vary in these texts, but all the versions connect it with the rape of the amṛta at the churning of the ocean.¹⁰⁴ The account of the Bower MS on the properties and uses of garlic shows some peculiarities which are absent from or disagreeing with other medical texts.¹⁰⁵ A garlic-festival (laṣunotsava) is described (I.17–18), and a procedure which circumvents the interdiction for brāhmaṇas to make use of garlic, by making it pass through a cow (I.34).¹⁰⁶

The haritakīkalpa of the Bower MS has parallels in the haritakīkalpas of the *Hārītasamhitā* (Kalpa 1) and *Aśvinīsamhitā*.¹⁰⁷ The story about the mythical origin of haritakī is told in a number of medical texts.¹⁰⁸ In the same vein as many medical treatises, the Bower MS enumerates seven kinds of haritakī.¹⁰⁹ A close parallel to the śilājatukalpa occurs in the *Carakasamhitā* (Ci.13.48–65).¹¹⁰ Other versions of a śilājatukalpa form part of a number of medical treatises.¹¹¹ The third kalpa of the Bower MS, the citrakakalpa, has almost no parallels elsewhere in medical literature.¹¹²

The well-known rasāyana procedure, called pippalivardhamāna, differs in the Bower MS (II.716–737) from the related prescription found in a large number of Sanskrit treatises,¹¹³ in being more complicated and taking a much longer time for its completion. The patient is advised to take one long pepper (pippalī) on the first day, and to increase the dose for ninety-nine consecutive days by one pepper daily, resulting in an intake of one hundred long peppers on the hundredth day. Thereupon, the dose is to be reduced by one pepper each day. At the end of this course a particular diet is to be observed for twenty-one days. An alternative shortened version of the procedure is also described in the Bower MS (II.749–752: pippalīśahasra).¹¹⁴

An important peculiarity of the Bower MS consists of its varying attitude towards the number of the doṣas. In many instances it accepts the traditional number of three, vāta, pitta, and kapha,¹¹⁵ but in a smaller number of passages it appears to accept blood (rakta) as a doṣa. A series of drugs are enumerated which cure in the rainy season disorders caused by vāta, in the autumn diseases caused by pitta, in the summer diseases brought about by blood, and in the spring diseases caused by kapha.¹¹⁶ Four compound medicines are described which respectively relieve disorders originating from kapha, blood (asra), pitta, and vāta (I.106–108).¹¹⁷ Vāta, rakta, pitta, and kapha are mentioned

as the causes of diseases that may be cured by use of the amṛtataila (II.308–309). Disorders brought about by pitta, blood (asra), and vāta are also referred to (I.84–85).

Noteworthy technical terms, occurring in the Bower MS, are: anuprayoga (II.55), after-diet, i.e., the type of food to be taken after the ingestion of a particular drug; ¹¹⁸ a-vabhedaka (II.512), a discharging application, for example an errhine; avakṣārī (II.91), a difficult term, taken by Hoernle to mean a lixivium, but possibly a corrupt reading; āvalika, a term specifying a particular rasāyana that consists of finely powdered nā-gabalā roots, stirred up in milk (II.753–758); āsu (I.55), regarded as identical with ā-sava; lāva rasa (II.1116); ¹¹⁹ pīṣima (II.578), a paste; sasyikā (II.400), a faultless female animal; unmardana (II.1053), a liniment. ¹²⁰

Nosological terms worthy of attention are: abhīlu (I.88, 100, 102); ¹²¹ akākolīna (III.62); ¹²² alāsaka (II.334 and 748); ¹²³ ālūna (II.849, 874, 876); ¹²⁴ apatantraka (II.316); ¹²⁵ bhūtagraha (II.101); ¹²⁶ irṣyāśaṇḍha (II.350 and 360); ¹²⁷ kacchaparoga (II.254); ¹²⁸ kākavandhyā (III.47); ¹²⁹ kaṇṭhaviḍālīkā (II.42); ¹³⁰ katrimālā (III.4); ¹³¹ khaḍa (II.359); ¹³² khallivāta (II.392); ¹³³ koṭha (II.568); ¹³⁴ kṣaya (II.86); ¹³⁵ kuṣṭha (II.86); ¹³⁶ nirvāhikā (II.427); ¹³⁷ paillya (II.854 and 857); ¹³⁸ parisravā (III.49); ¹³⁹ pilla (II.863 and 882); ¹⁴⁰ pilpa (I.100); ¹⁴¹ pratānaka (II.340 and 941); ¹⁴² pravāhikā (II.84, 157, 388, 429, 430, 943, 1090, 1094); ¹⁴³ upagulma (II.254); ¹⁴⁴ urodghāta (II.1099); ¹⁴⁵ urovibhandha (II.33); ¹⁴⁶ ūrdhvavāta (II.250); ¹⁴⁷ ūrūskambha or ūrūskambha (II.316, 334, 349, 357, 392); ¹⁴⁸ vardhma (II.208, 230, 272, 317, 334, 644). ¹⁴⁹

Noteworthy items of the materia medica are: ¹⁵⁰ abhīruparṇī (II.129); ¹⁵¹ abhīta-parṇī (II.187); ¹⁵² agaja (I.25); ¹⁵³ amarajā (II.81); ¹⁵⁴ amblātaka (II.106); ¹⁵⁵ canda-nasārivā (II.241); ¹⁵⁶ ciḍā (II.856); ¹⁵⁷ dembuka (II.837); ¹⁵⁸ garmuḍī (II.887); ¹⁵⁹ grāha (II.1100); ¹⁶⁰ gudikā (II.1035); ¹⁶¹ harita (I.111); ¹⁶² iṣṭakāpāthaka (III.65); ¹⁶³ japā (II.959); ¹⁶⁴ jhāmaka (I.90); ¹⁶⁵ jiṅganī (II.1073); ¹⁶⁶ kāla (II.1103 and 1115); ¹⁶⁷ keyūra (II.536); ¹⁶⁸ kuśālaparṇī (II.796); ¹⁶⁹ māruta (I.125); ¹⁷⁰ maṣī (II.1072); ¹⁷¹ mecika (II.415); ¹⁷² naḍa (I.72); ¹⁷³ naḍikā (II.292); ¹⁷⁴ prācīnikā (II.879); ¹⁷⁵ priyakasāla (II.397); ¹⁷⁶ rāmataruṇī (II.901); ¹⁷⁷ saurāṣṭra (II.57). ¹⁷⁷

In spite of its being used in a Buddhist community, the *Nāvanītaka* does contain formulae in which the flesh of various animals is prescribed as an ingredient. ¹⁷⁸ Moreover, persons making a habit of the use of alcoholic drinks are not looked down upon. ¹⁷⁹

The *Mahāmāyūrī* is said to protect against a long series of grahas and diseases. The grahas mentioned are called Deva, Nāga, Asura, Maruta, Garuḍa, Gandharva, Kinnara, Mahoraga, Yakṣa, Rākṣasa, Preta, Piśāca, Bhūta, Kumbhāṇḍa, ¹⁸⁰ Pūtana, Kaṭapūtana, and Skanda. ¹⁸¹

Among the evils and diseases enumerated are unmāda, chāyāgraha, ¹⁸² apasmāra, Ostāraka, ¹⁸³ Kaṅkhorda, ¹⁸⁴ Okiraṇa, ¹⁸⁵ Vetālas, a long series of fevers, ¹⁸⁶ a number of other diseases, and a series of śūlas.

The author(s)

The authors of the texts comprising the Bower MS are unknown. The laṣunakalpa of part I is unhesitatingly ascribed to Kāśīrāja by G. Hāldār, ¹⁸⁷ who also expressed as his

opinion that the *Nāvanītaka* of the Bower MS represents an altered, Buddhist version of an original *Nāvanītakasaṃhitā* by Suśruta. ¹⁸⁸

Date

Hoernle concluded that characteristics of the script of the Bower MS point to the third quarter of the fourth century A.D. as the period in which the various portions must have been written. ¹⁸⁹ Hoernle's dating is accepted by later authors, with the exception of J. Filliozat, in whose view it is preferable to adhere to a more approximate date, namely the fourth to sixth centuries. ¹⁹⁰

The period in which the texts composing the Bower MS may originally have been written is more difficult to determine. A number of details of the Bower MS establish beyond any doubt that its texts were copied from an already defective, not always easily legible, and therefore probably old MS. ¹⁹¹ Consequently, there must have been an interval between the writing of the autograph and the copying by the scribes of the Bower MS.

Some peculiarities of the MS may go back to the original author; part II, the *Nāvanī-taka*, and part III contain glosses, indicated as such, which the author may have added to the extracts from earlier authoritative works of which his work is mainly composed. ¹⁹²

Hoernle adduced arguments pointing to a succession of copies between the autograph of the *Nāvanītaka* and its copy in the Bower MS. He was convinced to have discovered indications testifying to a rather considerable interval, perhaps two or three centuries, between the composition of the *Nāvanītaka* and the copy known to us. Although his reasoning in this matter is not cogent, his conclusions may well be valid.

Hoernle tried to prove that the original author of the *Nāvanītaka* was acquainted with the *Bhelasamhitā*, the *Carakasamhitā* before its revision and completion by Dr-dhabala, and the *Suśrutasamhitā*, its Uttaratantra included. ¹⁹³ His reasoning was based on formulae in the *Nāvanītaka* that also form part of these treatises, and the references to Bhela and Suśruta in parts I and II of the Bower MS. ¹⁹⁴

However, as already clearly pointed out by J. Jolly, ¹⁹⁵ Hoernle's arguments are not conclusive. The way in which Suśruta is introduced in part I, and his relationship with the muni Kāśīrāja, disagree with the beginning of the *Suśrutasamhitā*, which, moreover, does not contain a laṣunakalpa, the subject of the conversation between Suśruta and Kāśīrāja. The formulae, said to be derived from the *Suśrutasamhitā*, ¹⁹⁶ are only distantly related to the parallels. ¹⁹⁷ To be true, Bhela is credited with some formulae, which proves that he was already a well-known medical authority, but the majority of the passages of the *Nāvanītaka* that form part of the *Bhelasamhitā* are not attributed to him and may be drawn from the floating medical tradition or early treatises, now lost. Caraka and his predecessor, Agniveśa, are not referred to at all, which pleads against borrowing from the *Carakasamhitā*; ¹⁹⁸ Ātreya, Agniveśa's teacher in the *Carakasamhitā*, is mentioned, but the formulae ascribed to him are absent from the *Carakasamhitā*. ¹⁹⁹

Consequently, it is preferable to suppose, as Jolly did, that the author of the *Nāvanītaka* drew upon the floating medical tradition and early treatises that have not been

preserved. However that may be, the medical parts of the Bower MS (I–III) constitute the earliest collections of recipes known. They give evidence of a long medical tradition, connected with numerous ancient authorities, and may be based on similar collections or other types of medical writings antedating the composition of the *samhitās* of Caraka, Suśruta and others.

Chapter 2

Bhelasamhitā

The *Bhelasamhitā*¹ is a comprehensive medical treatise chiefly concerned with internal medicine (*kāyacikitsā*). It is in many respects of the same type as the *Carakasamhitā* and may be said to belong, as the latter, to the school of Ātreya, although it also contains elements found in the *Suśrutasamhitā*, which gives it an unusual character.

The text of the *Bhelasamhitā* has been preserved in a single MS, incomplete and abounding with scribal errors, kept at the Mahārāja Serfoji's Sarasvatī Mahāl Library in Tanjore.² Several copies of this MS have been made in the course of time,³ and three editions have appeared, based on the MS itself or its copies.⁴

A fragment of the *Bhelasamhitā* was discovered by H. Lüders⁵ among the MSS brought from Central Asia by A. von Le Coq. This fragment consists of one page from a paper MS, found in Tuyoq,⁶ that dates from about the ninth century; it contains the text of Nidānasthāna 8.5cd to Vimānasthāna 1.22ab. The readings of this fragment are at places to be preferred to those of the Tanjore MS.

Contents

The contents of the *Bhelasamhitā* are summarily listed in the middle of the Sūtrasthāna (17.7cd–9ab), and said to consist of a Sūtrasthāna in thirty chapters, a Nidāna-, Vimāna- and Śārīrasthāna in eight chapters,⁷ an Indriyasthāna in twelve chapters, a Cikitsāsthāna in thirty, a Kalpasthāna in twelve, and, finally, a Siddhisthāna in twelve chapters. This table shows that the arrangement in sections (*sthāna*) and the number of chapters in each section are exactly the same as in the *Carakasamhitā*.

The order of the chapters, however, seems rather arbitrary at places, due to the disorderly condition of the MS.⁸

Preserved, completely or partly, are the following chapters: Sūtrasthāna 4–23 and 25–28; Nidānasthāna 2–8; Vimānasthāna 1 and 3–6; Śārīrasthāna 2–8; Indriyasthāna 1–12; Cikitsāsthāna 1–28; Kalpasthāna 1 and 3–9; Siddhisthāna 1–2 and 4–8. Completely or almost completely extant are Sūtrasthāna 5–19, 22–23 and 25–27; Nidānasthāna 3–5 and 8; Vimānasthāna 4; Śārīrasthāna 3–7; Indriyasthāna 4–12; Cikitsāsthāna 1–2, 8, 17, 25–26 and 28; Kalpasthāna 3–6 and 8; Siddhisthāna 4–7.

The *Bhelasamhitā* is more concise than the *Carakasamhitā* and uses simpler language. The verses are in śloka and anuṣṭubh metre and rather monotonous by presenting many repetitions of the same pattern.⁹ Prose passages are found only in Śārīrasthāna 4–8.¹⁰ The Sanskrit text is rather often grammatically incorrect.¹¹

The chapters of the *Bhelasamhitā* usually begin in the same way as in the

Carakasamhitā, but they end differently, with the words *ity āha bhagavān Ātreyaḥ*. Unlike the *Caraka-* and *Suśrutasamhitā*, the work has not been revised by some later author. The preserved version, however, differs from an earlier text that once must have been current.

The treatise is called after Bhela or Bheḍa,¹² one of the six pupils of Ātreya Punarvasu.¹³ Each of these pupils composed, according to the story related in the *Carakasamhitā*,¹⁴ a medical treatise, based on the words of their teacher.¹⁵

The *Bhelasamhitā* is basically in the form of a dialogue between Ātreya as a teacher and Bhela as a student. The former is also designated as Punarvasu (Sū.25.5), Punarvasu Ātreya (Śā.4.2),¹⁶ Cāndrabhāga (Sū.25.1), Cāndrabhāga Punarvasu (Sū.18.1),¹⁷ and Kṛṣṇātreya (Sū.16.1; Śā.3.9; I.1.14).¹⁸ However, Bhela is not the only person receiving instruction from Ātreya. In the chapter on the detection of poison in food (Sū.18) it is the royal sage (rājarsi) Nagnajit¹⁹ who asks Ātreya questions during the latter's stay in the country of Gāndhāra. Gurdālu Bhekin²⁰ is desirous of information on medical topography (Sū.13), while Suśrotar Medhavin,²¹ who puts forward his own opinions on the treatment of disorders of the doṣas, is instructed by Ātreya in this subject (Sū.25).

In a way similar to what is found in the *Caraka-* and *Suśrutasamhitā*, the *Bhelasamhitā* presents accounts of discussions among sages on important topics. Subjects of these discussions, which are less elaborate and smaller in number than in the *Carakasamhitā*, are the number of the tastes (Sū.12) and embryology (Śā.4). The persons taking part in the deliberations on the tastes are Ātreya, Khaṇḍakāpya, Maitreya, and a number of other sages.²² In both *Bhela-* and *Carakasamhitā* the meeting takes place in the Caitraratha forest. In contrast with the *Carakasamhitā*, the *Bhelasamhitā* does not attribute the views expounded to particular individuals. Nevertheless, as in the *Carakasamhitā*, seven different opinions are referred to, which are finally rejected by Ātreya, who proclaims the correct doctrine on the tastes.

The theories refuted by Ātreya claim that the tastes are one, two, three, four, five, six, or seven in number. The report in the *Bhelasamhitā* differs in some details from the one found in the *Carakasamhitā*.²³

The discussion on the question which part of the embryo develops first is also found in the *Caraka-* and *Suśrutasamhitā*.²⁴ The account of the *Suśrutasamhitā* disagrees with the versions of *Bhela-* and *Carakasamhitā*, which are rather similar in the composition of the assembly²⁵ and the views expressed.²⁶

Authorities mentioned on other occasions in the *Bhelasamhitā* are Bhadrāsauṇaka (Sū.9.7),²⁷ Bharadvāja (Śā.4.32; 6.1–2),²⁸ and Śaunaka (Sū.9.9; Śā.4.32; 8.3³⁰).

The Sūtrasthāna of the *Bhelasamhitā* is in its general outlines of the same character as the corresponding section of the *Carakasamhitā*, though distinctive features are present and the order of the chapters does not fully agree. Some chapters bear the same names as in the *Carakasamhitā*: Sū.6 (navegāndhārāṇīya; = Ca.Sū.7),³¹ 7 (indriyopakramaṇīya; = 8), 8 (mātrāśītiya; = 5), 14 (cikitsāprābhṛtiya; = 16), 15 (tisraīṣaṇīya; = 11) 16 (vātakalākalīya; = 12), 17 (daśaprāṇāyataniya; = 29), 19 (vidhiśoṇītiya; = 24), 20 (arthedaśamūliya; = 30: arthedaśamahāmūliya), 22 (sveda; = 14), 26 (aṣṭodariya; = 19), 27 (annapānavidhiya; = 27: annapānavidhi).³² Other chapters

correspond more or less to chapters of the *Carakasamhitā* with different names: Sū.5 (atyāśītiya) and Ca.Sū.5 (mātrāśītiya), Sū.9 (catuṣpādabhiṣagjītiya) and Ca.Sū.9 (khuḍḍakacatuṣpāda), 11 (samaśāyanaparidhanīya) and Ca.Sū.28 (vividhāśītapītiya), 12 (ātreyakhaṇḍakāpyīya) and Ca.Sū.26 (ātreyaabhadrakāpyīya), 25 (ṛtuvibhāgiya) and Ca.Sū.6 (tasyāśītiya). Chapters resembling Sū.10 (āmapradoṣīya), 13 (janapadavibhaktīya), 18 (annarakṣīya), and 23 (gāḍhapurīṣīya) are absent from the Sūtrasthāna of the *Carakasamhitā*.³³

The Nidānasthāna describes nearly the same eight major diseases as the Nidāna section of the *Carakasamhitā*, in a slightly different order. However, one exception should be noticed: kāsa has taken the place of raktapitta, though the latter disorder belongs to the eight diseases dealt with first in the Cikitsāsthāna, while chapter twenty of that section is concerned with the treatment of kāsa. In this regard it is very remarkable that the Tuyuq fragment of Bhela, already referred to, reads raktapitta instead of kāsa in the last lines of chapter eight of the Nidānasthāna, where the diseases described in that section are listed. This made Lüders³⁴ infer that the Tuyuq fragment represents a more original state of the text than the Tanjore MS.

The Vimānasthāna of the *Bhelasamhitā* differs considerably from the same section of the *Carakasamhitā*. Two of its chapters bear titles which are identical: Vi.1 (rasavimāna; = Ca.Vi.1) and 5 (vyādhitarūpiya; = Ca.Vi.7). The subject matter of chapter three, the title of which has not been preserved, and of chapter four (rogaprakṛtiviniścaya) is related to that of chapter six (rogāṇika) of Caraka's Vimānasthāna. Chapter six (ṛtuvimāna) is concerned with seasonal regimen (ṛtucaryā), described in chapter six (tasyāśītiya) of the Sūtrasthāna of the *Carakasamhitā*.³⁵

Six of the eight chapters of the Śārīrasthāna bear names which are identical with or closely similar to those of corresponding chapters of the *Carakasamhitā*: 3 (asamānagotrīya; = Ca.Śā.2: atulyagotrīya), 4 (puruṣanicaya; = 5: puruṣavicaya), 5 (śārīranicaya; = 6: śārīravacaya), 6 (khuḍḍikā garbhāvakraṇṭhi; = 3), 7 (śārīrasamkhyā; = 7), and 8 (jātisūtrīya; = 8).

Some chapters of the Indriyasthāna find their counterparts in Caraka's Indriyasthāna: 4 (sadyomaraṇīya; = Ca.I.10), 5 (yasyaśyāvīya; = 9: yasyaśyāvanimittīya), 6 (pūrvārūpiya; = 5), 7 (indriyāṇika; = 4),³⁶ 9 (gomayacūrṇa; = 12: gomayacūrṇīya), 11 (puṣpiya; = 2: puṣpitaka), and 12 (avākcītiya; = 8: avāksīrasīya).

The Kalpasthāna is comparable to the same section of the *Carakasamhitā*, the order of the chapters excepted.

The Siddhisthāna has only one chapter with a title that is also found in the *Carakasamhitā*: 7 (phalamātrāsiddhi; = Ca.Si.11).

The section that differs most from the *Carakasamhitā* is the Cikitsāsthāna. Caraka's chapters on rasāyana and vājīkaraṇa (Ci.1–2) are absent. Chapters one to nine correspond to chapters three to ten of Caraka's Cikitsāsthāna, although their order is not completely identical; moreover, the *Bhelasamhitā* devotes two chapters to the treatment of fevers.

Chapters of the Cikitsāsthāna of the *Bhelasamhitā* that are similar to chapters of the *Carakasamhitā* are: 10 (atisāra; Ca.Ci.19), 11 (grahāṇī; Ca.Ci.15), 13 (udara; Ca.Ci.13), 14 (ūrustambha; Ca.Ci.27), 16 (arśas; Ca.Ci.14), 17 (śvayathu; Ca.Ci.12), 20

(kāsa; Ca.Ci.18), 24 (vātavyādhi; Ca.Ci.28), 27 (vraṇa; Ca.Ci.25), and 28 (pānātyaya; Ca.Ci.24).

A separate chapter on kṣataksīṇa (Ca.Ci.11) does not form part of the *Bhelasamhitā*, where this disorder is merely mentioned in passing (Ci.4.73; 24.29; Si.7.50; 8.23). A separate chapter on mūtrakṛcchra (Ci.12) is absent from the *Carakasamhitā*, which deals with this disorder in the trimarmīya chapter (Ci.26). The treatment of visarpa and vātaṣoṇita is described in one chapter in the *Bhelasamhitā* (Ci.15), in two chapters (Ci.21 and 29) in the *Carakasamhitā*. The *Carakasamhitā* does not present a separate chapter on udāvarta, as the *Bhelasamhitā* does (Ci.18); Caraka describes it in the trimarmīya chapter (Ci.26). The same applies to hṛdroga (Bhela Ci.19; Ca.Ci.26). The chapter of the *Bhelasamhitā* on śīroroga, karṇaroga, kaṇṭharoga and arocaka (Ci.21) has no parallel in the *Carakasamhitā*, which deals with these diseases in a number of chapters (Sū.17 and Si.9: śīroroga; Ci.26: karṇaroga; Sū.18.34–36: rohiṇī, the only kaṇṭharoga mentioned; Ci.26: arocaka). The *Bhelasamhitā* has a separate chapter on ajīrṇa (Ci.22), described in the chapter on grahaṇī (Ci.15) of the *Carakasamhitā*. Nidrā (sleep) and mūrchā (fainting) are the subjects of one chapter (Ci.23); the *Carakasamhitā* deals with sleep and its disorders, as well as with mūrchā, in the Sūtrasthāna (Sū.21 and 24). The subjects of the chapter on plīhan and halīmaka (Ci.25) are distributed over two chapters of the *Carakasamhitā* (Ci.13, the chapter on udara, and 16, the chapter on pāṇḍuroga).³⁷ Apatantraka, the subject of a separate chapter in the *Bhelasamhitā* (Ci.26),³⁸ is discussed in the Siddhisthāna (9.14) of the *Carakasamhitā*.

Diseases discussed in the Cikitsāsthāna of the *Carakasamhitā* which are not dealt with in the corresponding section of the *Bhelasamhitā* are pāṇḍuroga (Ca.Ci.16),³⁹ hikkā and śvāsa (Ca.Ci.17),⁴⁰ chardi (Ca.Ci.20),⁴¹ tṛṣṇā (Ca.Ci.22),⁴² viṣa (Ca.Ci.23),⁴³ and yonivyāpad (Ci.30).⁴⁴

One of the chapters of the Sūtrasthāna (Sū.26: aṣṭodariya) gives an idea of the contents of the *Bhelasamhitā* in its original, complete form. It enumerates, exactly like the corresponding chapter of the *Carakasamhitā* (Sū.19: aṣṭodariya), the number of varieties of a long series of diseases.⁴⁵ Some diseases occurring in this list and not described in the preserved parts of the *Bhelasamhitā* are arbuda, bhagandara, ślīpada, upadamśa, and vidradhi.

The *Bhelasamhitā* is, as already mentioned, much more concise than the *Carakasamhitā*. The digressions on philosophical and religious subjects, which are characteristic of the *Carakasamhitā*, are absent from it. In spite of the large number of differences between the two works, the agreements between the treatises of Bhela and Caraka are close enough to warrant the conclusion that both belong to the Ātreya school of medicine.

Authors and works quoting from or referring to Bhela⁴⁶ are: Anantakumāra,⁴⁷ the Ārogyāmṛtabindu, Arunadatta,⁴⁸ the *Aṣṭāṅgahṛdayasamhitā*,⁴⁹ the *Aṣṭāṅgasamgraha*,⁵⁰ Bhāvamiśra,⁵¹ the *Bhesajjamañjūsāsannaya*, the Bower MS,⁵² the *Bṛhadra-sarājasundara*,⁵³ the *Bṛhannighaṇṭuratanākara*, Cakrapāṇidatta,⁵⁴ Candranandana,⁵⁵ Candrapa,⁵⁶ the *Carakasamhitā*,⁵⁷ Caube Kyākhūbadāsa's *Ajīrṇatimirabhāskara*, Ḍalhaṇa,⁵⁸ Dīpacandra's *Laṅghanapathyanirṇaya*, Gaṅgādhara,⁵⁹ Gayadāsa,⁶⁰ Gopālādāsa's *Cikitsāmṛta*, Gulrājśarmamiśra,⁶¹ Harṣakīrti, Hemādri,⁶² Jayaratna's *Jvara-*

parājaya, Jejjāta,⁶³ the *Jvaracikitsita*, the *Jvarasamuccaya*,⁶⁴ the *Kairālī* commentary on the *Aṣṭāṅgahṛdayasamhitā*,⁶⁵ Kalyāṇa's *Bālatantra*,⁶⁶ Karandīkar's *Nīdānāpikā*,⁶⁷ Kāśīrāma,⁶⁸ the *Kāśyapasamhitā*, the *Lakṣmaṇotsava*, Lolimbarāja,⁶⁹ the *Mādhavacikitsā*,⁷⁰ Mānakavi,⁷¹ the *Nāḍīcakra*,⁷² Nilamegha,⁷³ Niścalakara,⁷⁴ Nṛ-simhakavi,⁷⁵ the *Rasayogasāgara*, the *Rasendrasambhava*, Rūpanayana,⁷⁶ the *Sahasrayoga*,⁷⁷ Śivadāsaśena,⁷⁸ Sodhala,⁷⁹ the *Tantrasāra*,⁸⁰ Tisāṭa,⁸¹ Tōḍara,⁸² Trimalla,⁸³ Vācaspati,⁸⁴ Vāgbhaṭa,⁸⁵ Vijayaraksita,⁸⁶ the *Vīrasīṃhāvaloka*,⁸⁷ the *Yogaratanākara*,⁸⁸ Yogendranātha,⁸⁹ and Yogīndranāthasena.⁹⁰ Bhela is also quoted by the unknown author of the interpolated portions of Niścalakara's *Ratnaprabhā*.⁹¹

The *Bhelasamhitā* was one of the sources of the *Ma'din al-Shifā'*.⁹² Some scholars claim that Bhela's treatise was known to Ibn Sīnā.⁹³

The Tibetan tradition is acquainted with Bhela as a medical authority under the name of Gziñs-can.⁹⁴

Special features

Suppression (dhāraṇa) of the urges (vega) of pitta and kapha is described (Sū.6.5);⁹⁵ the urges of hunger, thirst and heavy breathing due to exercise are left unmentioned.⁹⁶ The drinking of water before or during a meal is advised against (Sū.6.43–44). The rule concerning the use of triphalā with every meal differs from the prescription in the *Carakasamhitā* (Sū.8.19).⁹⁷ The main properties of the mahābhūtas are slightly different (Sū.9.15cd–16).⁹⁸ The three types of digestion are characterized by three types of eructation (udgāra; Sū.10.13–14ab). The list of disorders arising from corruption of the element rasa disagrees with Caraka's list.⁹⁹ The same applies, to a varying degree, to the lists of disorders arising from corruption of blood, fatty tissue, bone marrow, and semen.¹⁰⁰ The *Bhelasamhitā* adds a series of disorders due to abnormalities during pregnancy.¹⁰¹ The disorders brought about by corruption of other constituents of the body, described by Caraka,¹⁰² are omitted by Bhela.

Bhela permits the combination of milk and fish, with the exception of the fish called cilicima (Sū.12.7–8).¹⁰³ The janapadavibhaktīya chapter (Sū.13), concerned with feeding habits and diseases prevalent in particular regions, has no counterpart in a separate chapter of the *Carakasamhitā*.¹⁰⁴ Rainy periods are described as dangerous and having a high incidence of disease (janamāra; Sū.13.8–9). The names of fever in various animals are enumerated (Sū.13.11–13). The disease called batālikā, unknown from other sources, is described as a risky ailment, requiring urgent treatment; its main symptom is the appearance of boils (piṭakā) in the armpits, groins, and elsewhere (Sū.13.14cd–18).¹⁰⁵ Bhela's ten abodes of prāṇa (prāṇāyatana; Sū.17.1–2) disagree with Caraka's list (Sū.29.3).¹⁰⁶ The preparation called yavāgū is said to be of eight types, while wholesome articles of food are twelve in number (Sū.17.6). The description of the heart (Sū.20.5–6) resembles that found in the *Suśrutasaṃhitā* (Sū.4.32). Eight types of sudation (sveda) are described (Sū.22),¹⁰⁷ whereas Caraka has a larger number (Sū.14). Disorders brought about by obstipation (gādhapuriṣa) are described (Sū.23.1–5), as well as disorders which occur when bile affects one of the seven bodily elements (Sū.25.25cd–29ab). Two varieties of prṣṭharoga¹⁰⁸ are mentioned

(Sū.26.6); their names are upakṣārin and kṣārin (Sū.26.27ab).¹⁰⁹ Six varieties of kāca, līṅganāśa and timira are mentioned, distinguished by their colours (Sū.26.1 and 9).¹¹⁰ Five causes of baldness (khālitya) and turning grey (palita) are distinguished (Sū.26.10–11).¹¹¹ Bhela acknowledges five varieties of arbuda (Sū.26.12),¹¹² mukharoga (Sū.26.13),¹¹³ bhagandara (Sū.26.14),¹¹⁴ and granthi (Sū.26.17),¹¹⁵ four varieties of abhiṣyandā and adhimantha (Sū.26.18),¹¹⁶ klaibya (Sū.26.19),¹¹⁷ eye diseases (Sū.26.20),¹¹⁸ upadaṁśa (Sū.26.21),¹¹⁹ āsrāva (Sū.26.22),¹²⁰ pipāsā (Sū.26.23),¹²¹ rohinikā (Sū.26.24),¹²² and arman (Sū.26.25).¹²³ Three types of alajī are mentioned (Sū.26.28ab)¹²⁴ and also three types of vidradhi (Sū.26.28ab).¹²⁵

Seven forms of sāṁtya are acknowledged (Sū.26.30cd–31ab), connected with one of the six tastes or all of them.¹²⁶ Seven types of ślipada are referred to (Sū.26.7).¹²⁷ Twenty kinds of parasites (kṛmi) are enumerated (Sū.26.31cd–33).¹²⁸

Two main categories of prameha are described: prakṛtiprabhava or sahaja, and sakṛta or janmottaraja (Ni.6.1–6).¹²⁹ A variety of unmāda caused by poison is absent, as it is from the *Carakasamhitā*.¹³⁰ The āgantuja type of unmāda does not include mental disorders caused by intense emotions, which are classified as mada, distinct from unmāda.¹³¹ The Nidāna chapter on unmāda denies that insanity may be the result of possession by supernatural beings (7.10). The Nidāna chapter on epilepsy (apasmāra) relates that an attack comes about when one or more of the doṣas seize the ten vessels located above the heart, and obstruct the pathway of the mind (Ni.8.3 and 8).¹³² A supernatural aetiology of apasmāra is rejected (Ni.8.13).¹³³

An intensely burning digestive fire (tīkṣṇāgni) is attributed to the combined action of vāta and pitta (Vi.3.5).¹³⁴ Three types of vipāka are mentioned: madhura and amla during the digestive process, kaṭu at the end of it (Vi.3.12).¹³⁵ Ten dehanibandhanas are enumerated (Vi.3.17).¹³⁶ The chapter on the constitutions (prakṛti) mentions seven cosmic constituents, also called prakṛti, consisting of avyakta, mahat and the five mahābhūtas, to which svabhāva¹³⁷ and kāla, the five senses, the five kinds of objects of the senses, and five kinds of buddhi are added (Vi.4.10–11).¹³⁸

The mental state of the parents during intercourse determines whether the child will be of a sāttvika, rājasa or tāmasa nature (Śā.3.17–20).¹³⁹

The five types of pitta are described (Śā.4.3–9).¹⁴⁰ Two kinds of ālocakapitta are distinguished: cakṣurvaiśeṣika, engaged in gross visual perception, and buddhivaiśeṣika, located between the eyebrows and engaged in subtle visual perception (Śā.4.4–5).¹⁴¹

The description of the digestive fire (kāyāgni; jātharāgni) mentions a somamaṇḍala (lunar disc) in the centre of the navel, having a sūryamaṇḍala (solar disc) within it, while in the centre of the latter the digestive fire is located (Śā.4.11cd–12).¹⁴² The size of the abdominal fire in various animals is said to depend on their body size (Śā.4.16–17ab).¹⁴³ The main task of a physician (kāyacikitsaka) consists of the treatment of disorders of the digestive fire (Śā.4.17cd–18ab).¹⁴⁴ The view that the heart is the first part of an embryo to develop is attributed to Parāśara (Śā.4.30).¹⁴⁵

The view that epilepsy (apasmāra) is caused by supernatural beings is categorically rejected (Śā.4.29).¹⁴⁶ Rasa is considered to be the most important bodily constituent (Śā.4.33). Twelve seats of ojas and tejas (i.e., the fiery element) are enumerated (Śā.5.

1). Four classes (yonī) of living beings are distinguished: jarāyuja (placentals), aṇḍaja (oviparous), udbhijja (germinating), and svedaja (engendered by moisture) (Śā.5.2).¹⁴⁷ The embryo is thought to develop out of six elements (kāya),¹⁴⁸ namely the five mahābhūtas and rasa (Śā.5.10). The puruṣa is described as śaḍdhātu, i.e., composed of the five bhūtas, together with brahman, which is avyakta (Śā.5.11).¹⁴⁹ Seven varieties of divine (divya) and seven of human (mānuṣa) character types (kāya) are described (Śā.5.15–25).¹⁵⁰

The six layers of the skin (Śā.7.1) are identical with those of the *Carakasamhitā*.¹⁵¹ The osteological system shows some peculiarities (Śā.7.2).¹⁵²

The list of viscera (koṣṭhāṅga; Śā.7.4) omits the pakvāsaya.¹⁵³ The list of pratyāṅgas (Śā.7.5) differs from Caraka's enumeration;¹⁵⁴ the items listed are: two gulphas (ankles),¹⁵⁵ two nitambas,¹⁵⁶ two jaṅghās (legs),¹⁵⁷ two piṇḍikās (calves), two ūrupiṇḍikās,¹⁵⁸ two parts called sphic,¹⁵⁹ two vṛṣaṇas (testicles), the śepha(s) (penis), two śaṅkhas (temples),¹⁶⁰ two vanḍaṇas (groins), two kukundaras,¹⁶¹ the basti (bladder),¹⁶² the śirṣa (head),¹⁶³ the udara (abdomen), two stanas (breasts), two bāhus (arms),¹⁶⁴ two aṁsakas,¹⁶⁵ the cubuka (chin), two oṣṭhas (lips), two dantaveṣṭas (gums), two śṛkkaṇis (corners of the mouth), the tālu (palate), the galaśuṇḍikā (uvula), two karnaś (ears), two karnaśaṣkulikās,¹⁶⁶ two gaṇḍas (cheeks), two akṣikūtas,¹⁶⁷ four parts called akṣivartman (eyelids), and two akṣis (eyes). The transmigration of the ātman is discussed (Śā.7.7), as it is in the *Carakasamhitā*.¹⁶⁸ The human body is said to contain one aṅjali of mastiṣka and śukla.¹⁶⁹ The list of sixteen adhyātmadevatās, who preside over bodily and mental functions (Śā.7.8), disagrees with the corresponding list of the *Carakasamhitā*.¹⁷⁰ Bhela's list consists of: agni, pṛthivī, āpāh, ākāśa, vāyu,¹⁷¹ vidyut,¹⁷² Parjanya,¹⁷³ Indra, gandharva, Mrtyu,¹⁷⁴ Aditya, Candramas,¹⁷⁵ Tvaṣṭar,¹⁷⁶ Viṣṇu,¹⁷⁷ Prajāpati, and Brahmā.

Religious elements in the treatment of fevers are mentioned (Ci.1.46–51; 2.39–41): paying homage to Vṛṣabhadhvaja, i.e., Śiva (1.46; 2.40) and Bhūtādhipati (2.40), as well as the recitation of Vedic mantras (1.49); the exorcist (bhūtavidyā)¹⁷⁹ should employ the caṇḍakarman¹⁸⁰ characteristic of bhūtavidyā (1.50). A series of opinions on the aetiology of irregular fevers (viṣamajvara) is referred to, rejected by Bhela, who asserts that they are caused by saṁnipāta (2.1–5). These fevers are thought to corrupt bone marrow, osseous tissue and fatty tissue on the first day, muscular tissue and blood on the second day, kapha and vāta on the third day, pitta on the fourth day (Ci.2.6–7). Religious elements are mentioned again in the treatment of irregular fevers: paying homage to Acyuta, i.e., Viṣṇu (2.40), and Vṛṣabhadhvaja, i.e., Śiva (2.40), as well as measures belonging to the realm of bhūtavidyā (2.41).

The *Bhelasamhitā* records that yakṣman or śoṣa presents either six or eleven symptoms (Ci.4.7ab).¹⁸¹ Nine incurable types of kuṣṭha, caused by one's karma, are described: puṇḍarika, śvitra, ṛṣyajihva, kākaṇa, audumbara, śatāruṣka, carmakūṣṭha, ekakuṣṭha, and vaipādika, as well as nine curable types, caused by the doṣas: sidhma, vicarcikā, pāmā, dadru, kiṭika or kiṭiba, kapālakūṣṭha, sthūlāru, maṇḍala, and viṣaja (Ci.6.18cd–38).¹⁸² The chapter on the treatment of prameha (Ci.7) refers to the following varieties: iḥṣumeḥa,¹⁸³ udakameḥa (also called ambu- and vārimēḥa),¹⁸⁴ sāndrameḥa,¹⁸⁵ bhasmameḥa,¹⁸⁶ lavaṇameḥa,¹⁸⁷ sikatameḥa, śuklameḥa, kṣārameḥa,

śītamēha, raktamēha, nilamēha,¹⁸⁸ and hastimēha (also called gajamēha).¹⁸⁹

The description of the pathogenesis of insanity (unmāda) is remarkable; the *Bhelasamhitā* regards it as a process in which the doṣas, seated in the space between palate and skull, first affect the manas, then the citta,¹⁹⁰ and finally the buddhi (Ci. 8.10–12ab). Possession (bhūtonmāda) is mentioned,¹⁹¹ but not given much attention to. The *Bhelasamhitā* seems to accept a division of labour between physicians and exorcists; the chapter on the treatment of insanity explicitly states that it is the task of physicians to prescribe drugs to patients with mental disorders, whereas the bhūtacikitsaka, the exorcist, should occupy himself with the religious treatment (Ci. 8.33).¹⁹² Less serious mental disorders, which may eventually develop into insanity, are designated by the term mada (Ci. 8.12cd–18).¹⁹³

The chapter on the treatment of epilepsy (apasmāra) contains a second version, different from that in the *Nidānasthāna*, of the pathogenesis (samprāpti) of this disorder, described in the following way: when the mind (citta), due to various causes, is disturbed, the heart becomes desiccated; subsequently, vāta obstructs the bodily heat (ūṣman) and reaches the channel (nāḍī) which transports water; the person, suffering from this ailment, is oppressed by thirst, becomes confused, and develops epilepsy (Ci. 9.2–4). The involvement of bhūtas in the causation of epilepsy is not mentioned, which is no matter of surprise, because such an involvement has been rejected categorically on previous occasions.¹⁹⁴

The āma variety of diarrhoea (atīsāra) is considered to belong to the kapha type of this disease (Ci. 10.11).¹⁹⁵ Varieties of diarrhoea caused by fear (bhaya) and grief (śoka) are described (Ci. 10.42–43).¹⁹⁶ The chapter on diarrhoea deals with viṣūci, vilambikā and alasa (Ci. 10.50–59).¹⁹⁷ It is also concerned with annavibhrama (Ci. 10.60),¹⁹⁸ and, curiously, with aridita (facial paresis), which is a vāta disease. A variety of aridita, caused by vāta obstructed by kapha (śleṣmopastabdhārdita), is separately discussed (Ci. 10.2.10–12ab).¹⁹⁹

The chapter on grahaṇī refers to the digestive fire as the basis of a person's life span (āyus) and the seat of the prāṇas (Ci. 11.1); it enumerates the diseases to which grahaṇīdoṣa may give rise (Ci. 11.9–11); the disorders of the digestive fire are also mentioned (Ci. 11.12–1). The chapter on mūtrakṛcchra (Ci. 12) probably also dealt with mūtrāghāta and āsmari. Special types of udara described, apart from the doṣic varieties,²⁰⁰ are dūṣyodara (Ci. 13.10–15ab),²⁰¹ udakodara (Ci. 13.15cd–18ab),²⁰² kṣatodara (Ci. 13.18cd–21ab),²⁰³ baddhodara (Ci. 13.21cd–25ab),²⁰⁴ and plīhodara (Ci. 13.25cd–26).²⁰⁵ The *Bhelasamhitā* fails to make mention of the special types of visarpa, caused by a combination of two doṣas (Ci. 15).²⁰⁶

The chapter on śopha (Ci. 17) does not describe the numerous varieties mentioned in the *Carakasamhitā* (Sū. 18), but restricts itself to four doṣic types and one āgantū type.²⁰⁷ The pitta type of cough (pittakāsa; Ci. 20.8–10) resembles the variety of pāṇḍuroga usually called kāmālā.²⁰⁸

The chapter on diseases of the head and ears (Ci. 21) mentions the following diseases of the head: śaṅkhaka, sūryāvarta, anantavāta, ardhāvabheda, śirāḥkampa, and mūrdaśvayathu (Ci. 21.1–34);²⁰⁹ diseases of the ears referred to are: bādhīrya, karṇasrāva, karṇaśūla, karṇaśvayathu, karṇavāta, karṇavedanā, krimija karṇaroga,

and raktaja karṇaroga (Ci. 21.51–77).²¹⁰ The same chapter is concerned with the treatment of arocaka (Ci. 21.38cd–48) and with the origin, symptoms and treatment of galaśuṇḍī, a disease of the throat (Ci. 21.49–50).²¹¹ A separate chapter, preserved fragmentarily, is devoted to sleep and fainting. This chapter describes the physiology of sleep and fainting (Ci. 23.1–8), excessive sleep, and insomnia (Ci. 23.9–13);²¹² it ends with some verses on mūrchā (Ci. 23.14–16).²¹³

The chapter on vāta diseases (Ci. 24) is incomplete. It describes the treatment of corrupted vāta, located in various constituents of the body, refers to the eighty vāta diseases, and mentions specific varieties.²¹⁴ The chapter on plīhan and halīmaka (Ci. 25) distinguishes four doṣic types of plīhan, a disease already described as plīhodara in a previous chapter (Ci. 13).²¹⁵

A separate chapter (Ci. 26) is devoted to apatantraka and its treatment.²¹⁶ The same chapter is concerned with the aetiology, symptoms and therapy of aridita, facial paresis (Ci. 26.26cd–32), a vāta disease already dealt with in a preceding chapter (Ci. 10).

The chapter on the treatment of vṛaṇa (Ci. 27) mentions twelve vṛaṇadoṣas (Ci. 27.15)²¹⁷ and thirty-six ways of treatment (upakrama; Ci. 27.16);²¹⁸ specialists in internal medicine (kāyacikitsaka) and surgery (śalyakṛt) are referred to (Ci. 27.14, 16, 20).²¹⁹ The chapter on pānātyaya (Ci. 28) describes four doṣic varieties²²⁰ and one specific disorder, called pānājīrṇa (Ci. 28.91cd–93ab).²²¹

In contrast with the *Carakasamhitā*, the *Kalpasthāna* of the *Bhelasamhitā* does not enumerate the synonyms of the medicinal plants dealt with in this section.

The *Siddhisthāna* is differently arranged, when compared with the corresponding section of the *Carakasamhitā*. The first chapter is concerned with emetic and purgative treatments. Chapter two deals with drugs administered by way of the nostrils (nasya); four varieties are distinguished: avapīḍa, anuvāsa, dhūma, and pradhamaṇa (Sū. 2.1).

Chapter four describes the symptoms and treatment of ten disorders (vyāpad) brought about by the improper administration of emetics and purgatives; these ten disorders are: parīsrāva, ādhmāna, vibandha, gudaniḥsrava, hṛdroga, śūla, parikartikā, jīvādāna, śīroroga, and pravāhikā.²²² Chapter five, concerned with clysters, refers to divergent opinions on this subject and Bhela's own view. Chapters six and seven are on the same subject. Chapter seven mentions disagreeing views on the best drug for use in an enema; Bhela himself maintains an eclectic position (7.2–3).²²³ Chapter eight is about the ten disorders caused by the injudicious use of enemas²²⁴ and on specific enemas.

Some interesting names of disorders, mentioned incidentally, are: ādhyavāta (Ci. 14.19),²²⁵ amlapitta (Ka. 6.11),²²⁶ kacchū (Sū. 11.8),²²⁷ kṣudāvāta (Ci. 14.19),²²⁸ nirvāhikā (Ci. 16.12; Sū. 7.45, 48, 50),²²⁹ pārśvaroga (Sū. 21.4 and 6), tapahśphoto (Sū. 4.19),²³⁰ and vipātikā (Sū. 11.8).²³¹

Many formulae and therapeutic rules find their counterparts in the *Carakasamhitā*; some recipes, absent there, recur, usually in more or less altered versions, in later treatises.²³²

Names of medicinal plants, mentioned in the *Bhelasamhitā*, but absent from the *Carakasamhitā*, are: ādaṇḍa (Ci. 16.69),²³³ āraṇyapippalī (Ci. 21.30),²³⁴ bhadrodu-mbarikā (Sū. 4.12 and 15),²³⁵ brahmabhūtikā (Sū. 27.23), candrākaśāka (Sū. 28.41),²³⁶

candravallī (Ci.26.21),²³⁷ caṭaka (Sū.27.11),²³⁸ gavādanī (Sū.4.5),²³⁹ hemavidārikā (Ci.14.12), kadambapūṣpī (Ci.26.21),²⁴⁰ kalamānaka (Sū.27.10),²⁴¹ kapila (Ci.24.23),²⁴² kaṇamoṭa (Ci.27.2),²⁴³ ketu (Sū.27.12),²⁴⁴ keśamāriṇī (Ci.9.6),²⁴⁵ keśavaṇī (Ci.26.21), kūlaka (Sū.27.12),²⁴⁶ kulīsa (Sū.4.13),²⁴⁷ kumārī (Ci.24.25), kurūṭikā (Sū.28.32),²⁴⁸ kuṭṭijaka (Sū.28.42), mācipatṭa (Ci.2.31), mahānimba (Ci.16.70),²⁴⁹ mahāvallī (Ci.26.17),²⁵⁰ modakī (Ci.24.27),²⁵¹ nikuṇṇikā (Si.7.7),²⁵² nīrakadambaka (Ci.24.25),²⁵³ pāribhadraka (Ci.8.24; 28.86),²⁵⁴ puṣkaravartaka (Sū.28.31),²⁵⁵ pū-tanā (Ci.2.35; 9.6),²⁵⁶ rājatṭa (Si.7.14),²⁵⁷ rubūka (Ci.21.68; Si.4.32),²⁵⁸ rūpasthā (Ci.9.6), samudrāntā (Ci.15.22; 27.5 and 8),²⁵⁹ śitīkā (Sū.28.32), śukānānā (Ci.6.68; Si.1.16),²⁶⁰ śukanāsā (Ci.26.17; 27.3),²⁶¹ sūkārī (Ci.2.35),²⁶² suvarṇapūṣpī (Sū.4.4),²⁶³ svādukāṇṭaka (Vi.5.6),²⁶⁴ takkola (Ci.24.8),²⁶⁵ turāṅgī (Si.7.14),²⁶⁶ vadhūṭikā (Si.8.41),²⁶⁷ and veṇucchatṭrāka²⁶⁸ (Sū.28.26).²⁶⁹

Some plant names which are characteristic of the *Carakasamhitā* are also found in the *Bhelasamhitā*: avākpūṣpī (Ci.16.40), bhaṇḍī (Si.4.22), cāraṇī (Ci.2.35), jayā (Ci.2.34), kāyasthā (Ci.2.34; 24.26), kuṇṇikā (Ci.13.27), nalikā (Ci.24.8), paṇṇāsa (Sū.27.10), pīluparṇī (Ci.14.13), poṭagala (Ka.3.7), rohiṣa (Ci.24.24; Ka.4.2; 5.2; 9.1; Si.7.14), śilodbheda (Ci.10.31), śuṣkaśāka (Sū.10.1), svarnayūthikā (Ci.16.79; 27.8), and vīrā (Ci.2.34; 24.25).

The author

No particulars are known about Bhela.

A number of peculiarities of the vegetable materia medica prompted R.S. Singh to assert that Bhela was a resident of Western India.²⁷⁰ Others are of the opinion that Bhela belonged to the region of Gandhāra,²⁷¹ because that country is mentioned in his treatise.²⁷²

Date

Bhela is often quoted by later authors, but, as only a minority among the quotations can be traced in the preserved text of the *Bhelasamhitā*,²⁷³ the majority are unsuitable for the purpose of elucidating its chronological position.

Ananta's *Yogarātnasamuccaya*, a treatise that is probably posterior to the fifteenth century, contains a rather large number of quotations from Bhela; some of these, or related verses, are found in the Tanjore MS.²⁷⁴

Narahari gives, in his *Vāgbhaṭamaṇḍana*, a quotation found in Bhela's *Vimānasthāna*.²⁷⁵

Nīśalākara's *Ratnaprabhā* ascribes a number of prescriptions of the *Cakradatta* to Bhela.²⁷⁶ Two of these form part of the text of the *Bhelasamhitā*.²⁷⁷ Eight quotations from Bhela in the *Ratnaprabhā* are found in the *Bhelasamhitā*.²⁷⁸

Soḍhala's *Gadanigraha* ascribes the formula of dhānavantaraghṛta²⁷⁹ to Bhela; this recipe itself is not found in the Tanjore MS of the *Bhelasamhitā*, but is referred to twice (Ci.6.50 and 15.39), which proves that it formed part of the complete text, still known to Soḍhala about A.D. 1200.²⁸⁰

One of Aruṇadatta's quotations²⁸¹ establishes that the *Bhelasamhitā* was known in the twelfth century. Two or three citations from Bhela's work in a monograph on fevers by an unknown author, the *Jvarasamuccaya*, are said to agree with the text of the Tanjore MS, while the majority are not found in the latter.²⁸² The oldest MS of this *Jvarasamuccaya* dates from A.D. 924,²⁸³ which establishes that the verses ascribed to Bhela are taken from a version of his work that antedates the tenth century.

Tīsaṭa's *Cikitsākalikā* contains a recipe ascribed to Bhela (248: hīṅupañcaka) that, although differently worded, is very close to the formula of the same name in the *Bhelasamhitā* (Ci.19.10), which indicates that the text consulted by Tīsaṭa in the tenth century was not altogether different from the one known to us.

Ṭoḍara's *Āyurvedasaukhyā* contains a quotation that is partly found in the *Bhelasamhitā*.²⁸⁴

Vijayarākṣita's quotation is very close to a verse actually found in the *Bhelasamhitā*.²⁸⁵

The Bower MS describes three gruels (yavāgū) attributed to Bhela.²⁸⁶ Eleven more prescriptions found in it²⁸⁷ form also part of the text of the *Bhelasamhitā*, without being associated with his name in the Bower MS. These recipes need not be taken from the *Bhelasamhitā*, as A.F.R. Hoernle claimed,²⁸⁸ who was convinced that the *Nāvanīṭaka* of the Bower MS is posterior to the *Bhelasamhitā*. They may well be from the floating medical tradition or from early treatises now lost.²⁸⁹

The attribution of some gruels to Bhela in the Bower MS indicates that he was regarded as a medical authority in early times, as is also apparent from the references to him as one of the six pupils of Punarvasu Ātreya who wrote their own textbooks on internal medicine (kāyacikitsā).²⁹⁰ The *Bhelasamhitā* itself shows unequivocally that Bhela belongs to the tradition connected with Ātreya and his special branch of medicine. A close study of the text of Bhela's treatise, as known to us, betrays, however, that it repeatedly departs from the tradition embodied in the *Carakasamhitā*²⁹¹ and even presents a not inconsiderable number of affinities with the teachings of the school of Dhanvantari, illustrated by the *Suśrutasaṃhitā*.²⁹² A smaller number of details show similarities with the *Kāśyapasamhitā*.²⁹³

Data proving that a *Bhelasamhitā* related to the treatise in the Tanjore MS was known in the period of Vāgbhaṭa are found in the *Aṣṭāṅgahṛdayasaṃhitā* and *Aṣṭāṅgasamgraha*. The *Aṣṭāṅgahṛdayasaṃhitā* refers to Bhela's formula of sahararataila,²⁹⁴ the *Aṣṭāṅgasamgraha* to Bhela's kṣārāgāda²⁹⁵ and sahararataila.²⁹⁶

A collection of formulae called *Jivakapustaka* contains a formula (Nr. 8), also found in the *Bhelasamhitā* (Ci.5.17–19). Bhela may be mentioned in an old Khotanese fragment of a Buddhist text.²⁹⁷

References to Bhela in other works that conflict with what is found in the text of the *Bhelasamhitā* are also known. Bhela's opinion on the application of clysters (basti) in children, as recorded in the *Kāśyapasamhitā*, disagrees with the view on this subject laid down in the *Bhelasamhitā*.²⁹⁸

The evidence collected from the references to and quotations from Bhela makes clear that the treatise fragmentarily preserved in the Tanjore MS is not completely identical with the work quoted.²⁹⁹ The chronological position of the preserved *Bhelasam-*

hitā can for that reason be determined only by means of internal evidence and the date of completion of its MS, about A.D. 1650.

The structure of the *Bhelasamhitā*, in particular the similarity of this structure to that of the *Carakasamhitā*, the partial identity of the titles of the chapters and their contents, the contents of the *Kalpasthāna*, etc., make it seem plausible to assume that the work is later than the *Carakasamhitā* after its redaction by Ḍṛḍhabala or of about the same date. The affinities with the *Suśrutasamhitā* make it improbable that Bhela's treatise is much earlier. Influences from the side of Vāgbhaṭa's works or Mādhava's *Rugviniścaya* are absent. The period between A.D. 400 and 750 may therefore have witnessed the development of an earlier text into the treatise known from the Tanjore MS.

Clues to the period in which the work acquired its present shape were collected by P.V. Sharma.³⁰⁰ Changes in matters pertaining to religion are perceptible when the *Caraka-* and *Bhelasamhitā* are compared. Both Śaivism and Vaiṣṇavism are represented in the latter,³⁰¹ whereas the former shows an emphasis on Vaiṣṇavism. Practices that became current in the Gupta age are alluded to; examples are Śiva worship on a cremation ground (Ci.2.40) and the practice of caṇḍakarman (Ci.1.50). Several types of ascetics are mentioned: kaśāyavastra, muṇḍa, jaṭila, and nagnaka (I.8.14) and mlecchas are referred to (Sū.5.25). Tantric influences are also detectable: the heart is compared with a wheel (cakra) on which the prāṇas are fixed (Sū.20.4), a solar and lunar disc are thought to be located in the umbilical region (Śā.4.11–12), etc.

The evidence taken together points to a period after Vāgbhaṭa, about the seventh century or somewhat later, as the age that saw the completion of the text of the *Bhelasamhitā* represented by the Tanjore MS.³⁰²

Chapter 3

Kāśyapasamhitā

The *Kāśyapasamhitā*¹ is the only specialized textbook on kaumārābhṛtya that has been preserved. Two MSS of this work are known. The first of these was discovered by Haraprasād Śāstrī in Kāthmāṇḍū in 1898;² the MS consists of only thirty-eight palm leaves and contains a very small portion of the text.³ The second MS, much more extensive, although incomplete and damaged as well, was acquired by Paṇḍit Hemrāj Śarmā.⁴ The editions of the *Kāśyapasamhitā* are based on this second MS.⁵

Contents

The *Kāśyapasamhitā* is composed in the form of a dialogue between Kaśyapa as the teacher and Vṛddhajīvaka as his pupil. Some of the colophons refer to the treatise as *Vṛddhajīvakiya Kaumārābhṛtya* (92 and 146), *Vṛddhajīvakiya Tantra* (227), *Vṛddhakāśyapīya Samhitā* (324), and *Bhārgavīya Samhitā* (331).⁶

A story about the transmission of the teachings embodied in the *Kāśyapasamhitā* is told in the last chapter of the *Kalpasthāna* (226–227): “The great sage Kaśyapa composed, for the benefit of mankind and by order of Brahmā, by the force of his austerities and seeing it with the eye of knowledge, a treatise, which was bestowed on the sages. Jivaka, the son of R̥cika,⁷ free from ignorance and pure, the first to understand this great treatise, made a condensed version of it. The sages, however, disapproved of the words of this child (i.e., Jivaka). Thereupon the pure Jivaka, only five years old, plunged into the Gaṅgā at Kanakhala,⁸ to emerge again in a moment, full of wrinkles and with grey hair. Astonished on witnessing this miracle, the sages gave him the name of Vṛddhajīvaka, accepted his treatise, and regarded him as the foremost among the physicians. When this treatise got lost during the Kali age, the yakṣa Anāyāsa⁹ preserved it, intent on the welfare of mankind. Afterwards, the learned Vātsya, who was of Vṛddhajīvaka's lineage, obtained this great treatise, after propitiating Anāyāsa. After a complete study of the three Vedas, the *R̥g-*, *Yajur-* and *Sāmaveda*, together with their auxiliary works (vedāṅga), and after appeasing Śiva, Kaśyapa and the yakṣas with austerities and devotions, he revised the treatise composed by Vṛddhajīvaka for the prosperity of mankind, in order to acquire merit, fame, and happiness.”

This story indicates that the text of the *Kāśyapasamhitā* is actually the revision by Vātsya of an earlier treatise. The attribution of the *Kāśyapasamhitā* to Kaśyapa does not explain its name, since *Kaśyapasamhitā* would have been more in conformity with usage.¹⁰ The Kaśyapa of the *Kāśyapasamhitā* is sometimes designated as Mārīca (183 and 202)¹¹ and Prajāpati (39; 79; 93; 123; 174; 185; 286);¹² he is once referred to as

Kāśirāja (363). Vṛddhajīvaka is referred to as Bhārgava (74; 75; 117; 214; 227; 240; 331) and, rather often, as Vṛddha, Sthavira or Sthavirajīvaka. The name Vṛddhajīvaka and the story about him refer to kaumārabhṛtya as the special subject of the treatise, because the first one to grasp this branch of āyurveda is depicted as a wise child. The name recalls that of the paediatrician Jīvaka, quoted in the Bower MS, and the Jīvaka of Buddhist literature.

The *Kāśyapaśaṃhitā* mentions, apart from the persons already referred to, a number of ancient sages and authorities who for the greater part are met with in other medical treatises. Their names are: Ātreya Punarvasu (147), Bhārgava Pramati (39), Bhela (147), Dāruvāha (33 and 39), Gārgya (147), Hiranyākṣa (39), Kāṅkāyana (39), Kautsa (152), Kṛṣṇa Bhāradvāja (39), Māṭhara (147), Pārāśarya (147 and 152), Vaideha Janaka (153), Vaideha Nimi (39), Vāryovida (39, 153, 324), and Vṛddhakāśyapa (153).

Most of these authorities appear on the scene on the occasion of discussions touching on controversial subjects. These discussions, resembling those recorded in the *Bhela*-, *Caraka*- and *Suśrutaśaṃhitā*, are three in number. The first one (39; Sū.27.3) is about the numbers of diseases to be distinguished. The following views are enunciated: all diseases, being associated with pain, are one (Bhārgava Pramati);¹³ diseases are twofold: *nija* and *āgantū* (Vāryovida);¹⁴ diseases are threefold: curable, amenable to palliative treatment, and incurable (Kāṅkāyana);¹⁵ diseases are fourfold: *āgantū*, and caused by one of the three *doṣas* (Kṛṣṇa Bhāradvāja);¹⁶ diseases are fivefold: *āgantū*, caused by one of the three *doṣas*, or caused by all three *doṣas* together (the royal sage Dāruvāha);¹⁷ diseases are sixfold, because foods and drinks have six tastes;¹⁸ diseases are of seven kinds: caused by one of the three *doṣas*, by a combination of two *doṣas*, or by all three together (Hiranyākṣa);¹⁹ diseases are of eight types: caused by one, two, or three *doṣas*, and of *āgantū* origin (Vaideha Nimi);²⁰ diseases are of innumerable varieties, because the *doṣas* involved may be balanced, present in excess, or deficient (Vṛddhajīvaka).²¹ Kāśyapa declares, as Vāryovida did, that diseases are either *nija* or *āgantū*, but adding that both categories consist of many varieties.

The second discussion, fragmentarily preserved, is concerned with the treatment of children by means of enemas (146–147; Si.1). Gārgya²² advances that an enema (*basti*) may be applied in all children, even immediately after birth; Māṭhara,²³ disagreeing, holds that an enema should not be administered in the first month after birth; Ātreya Punarvasu declares that the first three months of life are unsuitable; the view that one year should have elapsed is expressed by an authority whose name has not been preserved; Pārāśarya²⁴ is convinced that a child may profit from a *basti* when it is three years old; Bhela moves this limit to six years. Kāśyapa decides that enemas are applicable when a child is no longer breastfed and has become used to solid food.

The third discussion has the treatment with emetics for its subject (152–153; Si.3). Kautsa²⁵ distinguishes three grades in this treatment; Pārāśarya, apparently agreeing with him, adds that these three grades ought to be related to a patient's strength. The diet after the administration of an emetic is also dealt with; Vṛddhakāśyapa,²⁶ Vaideha Janaka,²⁷ and others, whose names are not extant, give their opinion. Some related subjects are touched upon by Vāryovida and Vātsya.²⁸ Kāśyapa, appearing again at the

end, expounds his thoughts, which should be regarded as final.

Dāruvāha (33; Sū.25.3–4) is mentioned once as the one who urges Vṛddhajīvaka on to put questions to Kāśyapa on the diagnosis of young children who are not yet able to speak.

Someone, several times addressed as king in the *Kāśyapaśaṃhitā*,²⁹ and apparently desirous of instruction by Kāśyapa, may be Vāryovida,³⁰ who is called a king in some verses dealing with drug treatment in children.³¹

The structure of the *Kāśyapaśaṃhitā* resembles that of the *Caraka*- and *Bhelasamhitā*. The chapters begin with an announcement of Kāśyapa, who mentions the title of the chapter that he is going to expound. In many cases, it is Vṛddhajīvaka who puts questions to Kāśyapa, who, surrounded by other sages,³² gives his answers.

The internal arrangement of the *Kāśyapaśaṃhitā* was originally the same as that of the *Caraka*- and *Bhelasamhitā* in containing a total of 120 chapters, distributed over eight sections with respectively thirty (Sūtrasthāna), eight (Nidānasthāna), eight (Vimānasthāna), eight (Śārīrasthāna), twelve (Indriyasthāna), thirty (Cikitsasthāna), twelve (Siddhisthāna), and twelve (Kalpasthāna) chapters. The order of the last two sections is peculiar to the *Kāśyapaśaṃhitā*, for the Kalpasthāna precedes the Siddhisthāna in both *Caraka*- and *Bhelasamhitā*. The verses providing this information on the sections and number of chapters of each section, found in the last chapter of the Kalpasthāna,³³ add that the supplementary section, the Khilasthāna, which distinguishes the *Kāśyapaśaṃhitā* from the *Caraka*- and *Bhelasamhitā*, originally consisted of eighty chapters.

Out of the total number of 200 chapters, the Khilasthāna included, seventy-eight have been preserved, partially (forty-seven chapters) or completely (thirty-one chapters): eleven from the Sūtrasthāna, two from the Vimānasthāna, five from the Śārīrasthāna, one from the Indriyasthāna, eighteen from the Cikitsasthāna, eight from the Siddhisthāna, nine from the Kalpasthāna, and twenty-four from the Khilasthāna. The Nidānasthāna is completely absent from the MS.³⁴

The *Kāśyapaśaṃhitā* is written in a mixture of verse and prose. Verse prevails over prose in general; the Vimāna- and Śārīrasthāna are, as in the *Carakasamhitā*, mainly in prose, as are some stray chapters, such as the Revatīkalpa and chapter fifteen of the Khilasthāna; the single extant chapter from the Indriyasthāna is in verse.

The work has many elements in common with the *śaṃhitās* of Caraka and Bhela, but differs in several respects, being chiefly concerned with kaumārabhṛtya, which is, accordingly, said to be the foremost among the eight divisions of āyurveda (61).³⁵

The extant chapters of the Sūtrasthāna describe the treatment with linctuses (leḥādhya; 1–6);³⁶ disorders associated with breast-feeding (Sū.19: kṣīropatti; 6–10);³⁷ dentition (Sū.20: dantajanmikādhya; 10–14);³⁸ piercing of the earlobes (Sū.21: cūḍākaraṇīyādhya; 14–16);³⁹ treatment with oils (Sū.22: sneha; 16–24);⁴⁰ sudation (Sū.23: sveda; 24–29);⁴¹ arrangements concerning equipment (Sū.24: upakalpanīya; 29–33);⁴² diagnosis in young children not yet able to speak (Sū.25: vedanādhya; 33–37);⁴³ the four pillars of treatment (Sū.26: cikitsāśampadīya; 37–39);⁴⁴ the classification of diseases and the enumeration of the disorders caused by vāta, pitta, kapha, and blood (Sū.27: rogādhya; 39–47);⁴⁵ auspicious and inauspicious bodily

marks,⁴⁶ and the sattva typology (Sū.28: lakṣaṇādhyāya; 47–54).⁴⁷

The extant chapters of the *Vimānasthāna* are about an imperfectly known subject⁴⁸ and about the initiation of students (śiṣyopakramaṇīya; 57–65).⁴⁹

The extant chapters of the *Śārīrasthāna* are concerned with anatomy, elements of Sāṃkhya philosophy, and other subjects (65–69);⁵⁰ pregnancy (asāmānagotrīya; 69–72);⁵¹ embryology (garbhāvākṛānti; 72–74);⁵² anatomy (śārīravacaya; 75–79);⁵³ procreation (jātisūtrīya; 79–88).⁵⁴

The subjects dealt with in the single extant chapter of the *Indriyasthāna* (oṣa-dhahṣeṣajīya; 89–92) are partly the same as those found in some chapters of Caraka's *Indriyasthāna*,⁵⁵ partly absent from the latter.⁵⁶

The extant chapters of the *Cikitsasthāna* deal with fevers (jvara; 93–95);⁵⁷ diseases of pregnant women (garbhīṇīcikitsita; 95–97);⁵⁸ puerperal diseases (duṣprajāta-cikitsita; 97–98); disorders caused by bālagrahas (98–105); plīhan and halīmaka (105–106);⁵⁹ udāvarta (106–108);⁶⁰ rājayakṣman (109–111);⁶¹ gulma (111–115);⁶² kuṣṭha (115–119);⁶³ mūtrakṛcchra (120–122);⁶⁴ wounds and ulcers (dvivraṇīya; 123–130);⁶⁵ pratiśyāya (130–132);⁶⁶ uroghāta (132–133); śopha (133–134);⁶⁷ kṛmi (134–135);⁶⁸ madātīyaya (135–139);⁶⁹ phakka (139–142); disorders in wet-nurses (dhātīcikitsita; 142–146).⁷⁰

The extant chapters of the *Siddhisthāna*⁷¹ are called: (1) rājaputrīyā (146–149; on the application of enemas in children); (2) trilakṣaṇā (149–152; on the right and wrong ways of administering pañcakarman);⁷² (3) vamanavirecanīyā (152–159; on emesis and purgation);⁷³ (4) nastahkarmīyā (159–161; on nasal therapy);⁷⁴ (5) kriyāsiddhi (162–163; rules for patients during treatment);⁷⁵ (6) bastikarmīyā (164–165; on wrong ways of administering enemas);⁷⁶ (7) pañcakarmīyā (165–168; on indications and contra-indications);⁷⁷ (8) māṅgalasiddhi (168–169; recipes for efficient enemas).

The *Kalpasthāna* differs considerably from the corresponding section of the *Caraka- and Bhelasamhitā*. The nine chapters which are extant are concerned with: (1) fumigations (dhūpa; 170–174); (2) laṣunakalpa (174–181); (3) kaṭutailakalpa (181–183); (4) ṣaṭkalpa (183–185); (5) śatapuspāśatāvarīkalpa (185–187); (6) revatīkalpa (187–202); (7) bhojanakalpa (202–213); (8) viśeṣakalpa (213–225); (9) samhitākalpa (225–227).

The *Khilasthāna*⁷⁸ is of a mixed character; it contains chapters on the aetiology, symptomatology and treatment, or treatment only, of particular diseases, some of which have already been dealt with in previous chapters; chapters on subjects with a more general bearing are also found in it.

The *Khilasthāna* may be due to Vātsya, who added it as a supplement to the *Vṛddhajīvakīyatantra* after revising the latter.⁷⁹ It has been given the same structure as the preceding sections. The supplementary character appears undisguisedly in the first verses of its first chapter, where *Vṛddhajīvaka* approaches Kaśyapa and asks him to elucidate the causes of irregular fevers, reminding him that he failed to discuss this subject in the chapter on the treatment of fevers.⁸⁰

The subjects of the extant chapters of the *Khilasthāna* are: (1) irregular fevers (viṣamajvaranirdeśīya; 227–234); (2) the treatment of fevers in general (viśeṣanirdeśīya; 234–240); (3) principles of treatment (bhaiṣajyopakramaṇīya; 240–249); (4)

soups (yūṣanirdeśīya; 249–255); (5) diet and related subjects (bhojyopakramaṇīya; 255–260); (6) the doṣas, the tastes, and their combinations (rasadoṣavibhāgiya; 261–268); (7) purificatory treatments (saṃsuddhiviśeṣaṇīya; 268–277); (8) the treatment with enemas (bastiviśeṣaṇīya; 277–286); (9) the aetiology, symptomatology and treatment of raktagulma (raktagulmaviniścaya; 286–292); (10) the treatment of diseases in pregnant women (antarvatnīcikitsita; 293–304); (11) the treatment of puerperal diseases (sūtikopakramaṇīya; 304–316); (12) the treatment of infants (jātakarmottara; 316–319); (13) the aetiology, symptomatology and treatment of kukkuṇaka (kukkuṇakacikitsita; 319–324); (14) the aetiology, symptomatology and treatment of visarpa (visarpacikitsita; 324–331); (15) the aetiology, symptomatology and treatment of carmadala (carmadalacikitsita; 331–335); (16) the aetiology, symptomatology and treatment of amlapitta (amlapittacikitsita; 335–339); (17) the aetiology, symptomatology and treatment of swellings (śothacikitsita; 339–345); (18) the aetiology, symptomatology and treatment of śūla (śūlacikitsita; 345–349); (19) supplementary prescriptions concerning the treatment of the eight types of fever (aṣṭajavaracikitsitottara; 349–353); (21) treatments with honey (madhuviśeṣaṇīya; 353–354); (22) the medicinal properties of milk (kṣīraguṇaviśeṣīya; 354–356); (23) the medicinal properties of water (pānīyaguṇaviśeṣīya; 356–359); (24) the medicinal properties of meat (māṃsaguṇaviśeṣīya; 359–363); (25) the feeding habits of the inhabitants of various countries (deśasātmīya; 363–364).

The text of the *Kāśyapasamhitā* repeatedly refers to its various sections and subjects dealt with there;⁸¹ the name of a particular chapter is rarely mentioned.⁸²

The author of the treatise or its revisor, Vātsya, was well acquainted with differences of opinion among medical authorities, as shown, apart from the discussions already described, by a rather large number of passages where dissentient points of view are taken into consideration or merely registered.⁸³ On some occasions Kaśyapa's own opinion, always regarded as decisive, is clearly stated.⁸⁴ On one of these, he appears to reject a view expressed in the *Carakasamhitā*.⁸⁵

Medical schools specializing in other branches of medicine than *kaumārabhrīya* are referred to.⁸⁶

Quotations⁸⁷

An anonymous monograph on fevers, called *Jvarasamuccaya*, contains a considerable number of verses, attributed to Kaśyapa, which form part of the *Kāśyapasamhitā*.⁸⁸ The corresponding verses are not only found in those sections of the *Kāśyapasamhitā* which are old or at least based on an older version, but also in the *Khilasthāna*. The stanzas that cannot be traced can without much hesitation be supposed to belong to Vātsya's revised version of the *Kāśyapasamhitā*.

Some verses, quoted from the *Bhālukitantra* in the *Madhuakośa ad Mādhavanidāna* 2.18–23 are found in the *viśeṣakalpādhyāya* of the *Kāśyapasamhitā*.⁸⁹ The verses describing the two saṃnipāta fevers called vidhu and phalgu (*viśeṣakalpa* 28cd–31ab) recur, without mention of a source, in Vaṅgasena's *Cikitsāsārasaṃgraha* (jvara 354–356) and Bhāvamiśra's *Bhāvaprakāśa* (cikitsā 1.459–461). Another stanza, said to be

from Bhāluki in the *Ātaikadarpaṇa* ad *Mādhavanidāna* 2.24, forms part of the viśe-
śakalpa chapter as well (218).⁹⁰

The recipes of the pills against children's diseases, attributed to Kāśyapa in the Bower MS (II.1010–1040), are supposed to have been taken from Khilasthāna 17 and 18 of the *Kāśyapasaṃhitā* by V.N. Pandey and A. Pandey,⁹¹ but cannot be traced in these chapters.

The *Kāśyapasaṃhitā* is quoted in Dharmadatta's *Tridoṣasaṃgraha*.

R.C. Majumdar's claim⁹² that the *Kāśyapasaṃhitā* is quoted in the Bower MS and contains many quotations, not found elsewhere, from the most ancient works of the Ātreya school, is entirely unfounded.

Special features⁹³

The rasa derived from the food is, in a pregnant woman, divided into three portions, which nourish the unborn child, the mother's body and the mother's breasts (2; 287; Khila 9.20).⁹⁴ A child whose own mother has died and who is being cared for by a stepmother is called kalyāṇamātrka (4). Disorders of the breastmilk are attributed to demonic influences, in conjunction with the doṣas (6; Sū.19).⁹⁵ The group of drugs which purify the breastmilk (kṛtaviśodhana; 7) is closely related to the same group of the *Carakasamhitā* (Śā.8.56). Foreign bodies in the food or drink of the mother or wet-nurse are called vajra⁹⁶ and give rise to a disease called stanakīlaka (9–10).⁹⁷ Mothers whose fine breasts are injured by the jealous glances of other women are advised to take recourse to Tantric practices (10: tantrāvacāraṇa).

Chapter twenty of the *Sūtrasthāna* (10–14)⁹⁸ describes the human set of teeth, both milk teeth and second teeth; the central incisors (rājadanta), lateral incisors (basta), canine teeth (daṃṣṭrā), and (pre)molars (hānavya) are separately mentioned.⁹⁹ The same chapter describes normal and abnormal teething. Particular rituals should be performed when abnormalities are observed.¹⁰⁰ Four characteristics of the set of teeth are said to have an auspicious or inauspicious meaning.¹⁰¹ Piercing of the ears (karṇavedha) is described (15; Sū.21).¹⁰²

The effects of the four fatty substances on the doṣas (16–17; Sū.22) differ to a certain extent from the views expressed in the *Caraka-* and *Suśrutasaṃhitā*;¹⁰³ the anupānas to be used after the ingestion of a fatty substance are the same as those mentioned in the *Carakasamhitā*.¹⁰⁴

Eight types of sudation (sveda) are described (26–29; Sū.23): hastasveda, pradeha, nāḍīsveda, prastarasveda, saṃkarasveda, upanāha, avagāha, and pariṣeka.¹⁰⁵ The term trikaṭhoraka,¹⁰⁶ employed in the verses on saṃkarasveda (28), may refer to the sand (sikatā), dust (pāṃśu) and pebbles (pāṣāṇa) of Caraka's piṇḍasveda (Sū.14.26), though the term itself does not occur in its description.

Four varieties of ajirṇa are distinguished: āma, vidagdha, saśleṣman and rasaśeṣa (32; Sū.24).¹⁰⁷ Viśūcikā and alasaka are described as related disorders (35; Sū.25.27–28), in the same way as in the *Carakasamhitā* (Vi.2.10–12). Separate disorders, characterized in the same chapter (35; Sū.25.30–33), are śuṣkakaṇḍū¹⁰⁸ and āma.¹⁰⁹ Madātyaya as a disease occurring in children (36; Sū.25.36) is different from the madātyaya

or pānātyaya in adults, which comprises disorders resulting from the abuse of alcoholic drinks.

The *Kāśyapasaṃhitā* recommends treating mental disorders in the same way as bodily diseases (39; Sū.27.5). A term used to designate the doṣas is dhātusthūṇā (40; Sū.27.6). The two main categories of disease, nija and āgantū (40; Sū.27.8–9), are defined as in the *Carakasamhitā* (Sū.20.4), but the *Kāśyapasaṃhitā* mentions, as belonging to the category āgantū, afflictions which are adhivata, a term akin to the ādhidaivika category of the *Suśrutasaṃhitā* (Sū.24).

The eighty vāta, forty pitta and twenty kapha disorders (41–44; Sū.27.19–43) are largely identical with those enumerated in the *Carakasamhitā* (Sū.20.10–17).¹¹⁰ The *Kāśyapa-* (45; Sū.27.49–56) and *Carakasamhitā* (Sū.19.3) also agree on the number of varieties of each disease to be distinguished.

Blood and pitta are said to be related to each other, but a separate list of diseases caused by corrupted blood is presented (46; Sū.27.63–64).¹¹¹ The list of auspicious and inauspicious bodily signs in children (47–48; Sū.28.6) is more detailed than in the *Carakasamhitā* (Śā.8.51).¹¹²

The sattva typology of the *Kāśyapasaṃhitā* (51–54) differs to some extent from this typology as described in the *Carakasamhitā* (Śā.4.37–39).¹¹³ It adds a prajāpatya type to the śuddha group and replaces the praita sattva by two types, called bhūta and yākṣa. Nine sāra types are mentioned; the ninth type, added to the eight of the *Carakasamhitā* (Vi.8.102–114), is called ojaśśāra (54).

The *Vimānasthāna* mentions a group of afflictions called avekṣitajagada (57).¹¹⁴ The *Śiṣyopakramaṇīya* chapter of the same section gives an elaborate account of the initiation of students (57–65). Kaumārābhṛtya is said to be the foremost of the eight divisions of āyurveda and to be based on the *Atharvaveda* (61).¹¹⁵

The *Kāśyapasaṃhitā* permits the study of āyurveda to students from all four varṇas (61).¹¹⁶ The same chapter contains its own version of the divine origin of āyurveda and its descent to earth (61): Brahmā, after creating the universe, bestowed the science of life on the Aśvins who transmitted it to Indra, who, in his turn, gave it to the four sages Kāśyapa, Vasiṣṭha, Atri and Bhṛgu, who endowed their sons and students with it.¹¹⁷ The thesis is defended that āyurveda is not dependent on the *Atharvaveda* or all four Vedas, but that it is the fifth Veda, as important in relation to the other four as the thumb in relation to the four other fingers (61–62).

The *Śārīrasthāna* refers to a series of five and a series of six seasons (65). A number of terms reminiscent of Jainism occur in particular in this section of the *Kāśyapasaṃhitā* (65–66).¹¹⁸ The cycle of time is, in conformity with Jain doctrine, divided into two halves, called utsarpiṇī and avasarpiṇī. Each half is subdivided into three yugas, the utsarpiṇī into Ādi-, Deva- and Kṛtayuga, the avasarpiṇī into Tretā-, Dvāpara- and Kaliyuga. The characteristics of human beings in these eras are elaborately described. The names for an aspect of the bodily structure, called saṃphanana,¹¹⁹ in the four last yugas evoke, partly at least, Jain terms: nārāyaṇa in the Kṛtayuga, ardhannārāyaṇa in the Tretāyuga,¹²⁰ kauśika in the Dvāparayuga, and prajāñaptipīṣita in the Kaliyuga. The life span of a human being in these four eras is declared to be one palitopama,¹²¹ a quarter, an eighth of an palitopama, and one hundred years. The same chapter contains

an outline of human anatomy (66) and a brief sketch of Sāṃkhya philosophy (67).¹²²

The numbers of bones, vessels, etc., mentioned in the outline of anatomy, agree for the greater part with those of the *Carakasamhitā*. An exception forms the number of joints (sandhi), which is 381 in the *Kāśyapasaṃhitā*, but 200 in the *Carakasamhitā* (Śā.7.14). Some other numbers disagree with those of the *Suśrutasamhitā*.¹²³

The description of the development of the child in the womb (70–72)¹²⁴ largely agrees with the *Carakasamhitā* (Śā.4). The lists of bodily constituents thought to be connected with each of the five mahābhūtas (72) resemble the lists of the *Carakasamhitā* (Śā.4.12) without being identical.¹²⁵ The same applies to the constituents derived from the father and the mother (72),¹²⁶ the ātman, and sātmya (73).¹²⁷ The list of seven receptacles (āśaya; 74) disagrees with what is found in other sources.¹²⁸

The number of bones in the human body amounts to 363 (75), which odd number implies that the text of the śārīravicya chapter cannot be correct.¹²⁹ The ten abodes of the prāṇas (prāṇāyatana; 76) are in conformity with one of the two series found in the *Carakasamhitā* (Sū.29.3).¹³⁰ The number of viscera is thirteen in the *Kāśyapasaṃhitā* (76), fifteen in the *Carakasamhitā* (Śā.7.10). The number of minor parts of the body is eighty-seven in the *Kāśyapasaṃhitā* (76–77), fifty-six in the *Carakasamhitā* (Śā.7.11). The total number of the vessels called sirā is 700 (66), ten of which, called mātara, are the most important ones (77). Peculiar to the *Kāśyapasaṃhitā* is the mention of one hundred vessels (dhamanī), originating from each ear, which transport air (anila = vāta) and are declared to be the supports of agni and soma (78); a preceding chapter of the Śārīrasthāna (66) considers them to be two hundred in number and to have their origin in the palate (tālu). The pores of the skin (romakūpa), which belong to the category of minute vessels (77; sūkṣmasrotas), are said to number 200,000 in males, 150,000 in females (79).¹³¹ The quantities of bodily constituents (78) agree with those of the *Carakasamhitā*.¹³²

The jātisūtrīya chapter of the Śārīrasthāna employs Vaiśeṣika terminology (79). The female procreational fluid (śoṇita) and the male semen are said to be fully formed from the age of sixteen onwards (79).¹³³ This chapter declares that the part of the menstrual cycle fit for sexual intercourse covers twelve days (the fourth to the fifteenth) for a brāhmaṇa couple, eleven for kṣatriyas, ten for vaiśyas, and nine for members of other groups (80);¹³⁴ this rule is not found in other medical works. The putrīyā īṣṭi, aiming at male offspring, described in this chapter (81), differs in details from the kāmīyā īṣṭi of the *Carakasamhitā*.¹³⁵ The diet and recommended mode of life of a pregnant woman are described in detail (84).¹³⁶ The management of labour is discussed (84–86).¹³⁷ The labour pains, called āvi in the *Caraka-* and *Suśrutasamhitā* (Ca.Śā.8.37–38; Su.Ni.8.12), are designated by the term grāhī in the *Kāśyapasaṃhitā* (85).¹³⁸

The Indriyasthāna (89; I.1.3–4) divides remedial measures into two broad categories: auśadha (treatment with drugs) and bheṣaja (religious treatment).¹³⁹ Grahas mentioned are: Skanda, Skandāpasmāra, Skandapitar, Paundarika, Revatī, Suṣkarevatī, Śakunī, Mukhamaṇḍikā, Pūtanā, and Naigameṣin (90).¹⁴⁰ The same seven types of dreams (91; I.1.23cd–24ab) as those found in the *Carakasamhitā* (I.5.43) are listed.

The chapter of the Cikitsitasthāna concerned with diseases of pregnant women mentions parikartikā, pravāhikā,¹⁴¹ śoṭha, kāmālā, hṛdroga, vātaroḡa, ūrdhvānila,¹⁴²

hikkā, and śvāsa (95–96).¹⁴³ The chapter on puerperal diseases (duṣprajācīkṣita) has a long list of these disorders (97).¹⁴⁴

The chapter on children's diseases caused by demonic beings (bālagraha) enumerates the twenty names of Revatī (99) which, when twice daily recited, protect a child from attacks by grahas (100). Guha, i.e., Kārttikeya, exposes that he regards Revatī, along with her five brothers and her sister Śaṣṭhī, as deserving of the same homage which is paid to himself; the sixth tithi, called ṣaṣṭhī, will be the day on which she should be worshipped. Two forms of Śaṇmukhī Śaṣṭhī are distinguished, Sūtikāṣaṣṭhī¹⁴⁵ and Pakṣaṣaṣṭhī.¹⁴⁶ A long list of disorders is said to be caused by Revatī (100).¹⁴⁷ The chapter goes on with a description of their treatment. The next subject is a myth relating how Pūtanā was born, another female demon, who bears five names.¹⁴⁸ The treatment of the disorders she may bring about is dealt with (101–102). Subsequently, disorders caused by Andhapūtanā and by Śītapūtanā, also known as Kaṭapūtanā,¹⁴⁹ are described, together with their treatment (102–103). The next verses contain the mythical origin of Mukhamaṇḍikā or Mukhārcikā, a female attendant of Skanda (= Kārttikeya) (103). The preserved part of the chapter ends with descriptions of the treatment of ailments caused by Mukhamaṇḍikā and Śītapūtanā (103–105).

The chapter on udāvarta lists six varieties, brought about by the suppression of the urges to break wind, defecate, urinate, ejaculate, vomit and sneeze (106);¹⁵⁰ the same chapter describes ānaha (106).¹⁵¹

Rājayakṣman is said to present six or eleven symptoms (110).¹⁵² The *Kāśyapasaṃhitā* (116) mentions the same nine curable and incurable types of kuṣṭha as the *Bhelasamhitā*. The doṣas involved in some of the varieties of kuṣṭha are the same as those mentioned in the *Carakasamhitā* (Ni.5.5), with the exception of the two doṣas giving rise to sidhma.¹⁵³ The eight types of mūtrakṛcchra (120)¹⁵⁴ differ from those mentioned in the *Caraka-* and *Suśrutasamhitā*,¹⁵⁵ aśmarī (vesical calculi) and śarkarā (vesical gravel) are referred to in the chapter on mūtrakṛcchra, but not characterized. The two main categories of ulcers (vraṇa; 123) are the same as in the *Carakasamhitā* (Ci.25.5): nija and āgantū. Kāśyapa declares in the chapter on this subject (dvivraṇīyacikṣita)¹⁵⁶ that he will deal with it succinctly, because it belongs to the domain of another medical specialism. A series of therapeutic procedures (upakrama) is listed (124), without indicating their number.¹⁵⁷ The same chapter (126) enumerates types of boils (piḍakā), occurring in children: three with an excess of kapha (śarāvīkā, kacchāpikā, jālinī), three with an excess of pitta (sarṣāpikā, alājī, vidradhī), one with an excess of vāta (vinatā), and one with an excess of all three doṣas (aruṣhikā).¹⁵⁸ The vraṇa chapter also describes the aetiology, symptoms and treatment of arakīlikā (128), a disease unknown from other sources under this name.¹⁵⁹ Another, otherwise unknown, disorder, found in this chapter, is āmaccheda (129).¹⁶⁰

The dvivraṇīya chapter contains an interesting myth on the origin of a particular type of boils (gaṇḍa) in children (129). This disorder is attributed to an elephant, called Duḥsaha, appearing in dreams of children and frightening them. This animal, resembling Airāvata, was created by Indra in order to satisfy Mahāśena. Duḥsaha created, in his turn, two grahas, called Śākha and Viśākha, who, out of gratitude, made him obtain the overlordship of all upagrahas.¹⁶¹ The treatment of the boils caused by Duḥsaha

consists of both drugs and homage paid to him on the pañcamī (fifth tithi) of each lunar month.

The chapter on pratiśyāya refers to blood on the same footing as the three doṣas (130). A separate chapter is devoted to uroghāta (132–133), a disease related to pratiśyāya.¹⁶² Four doṣic types of uroghāta are referred to. Śopha (inflammatory swelling) is said to be of four types (133).¹⁶³ The chapter on the treatment of parasitic disorders (kṛmīroga) refers to viḍaṅgaghṛta (134).¹⁶⁴ Three disorders due to the abuse of alcoholic drinks are distinguished: pānātyaya, pānavibhrama and pānāpakrama (135).¹⁶⁵ Four doṣic types of pānātyaya are described (137).¹⁶⁶

A disease not described in any other treatise is phakka (139–142). A child affected by it does not learn to walk at the normal age.¹⁶⁷ Three varieties of phakka are distinguished, caused by a disorder of the breastmilk (kṣīraja), a disorder of the mother during pregnancy (garbhaja), and some other disease (vyādhīja). Preparations employed in the treatment of phakka are kalyāṇakaghṛta, ṣaṭpalaghṛta and amṛtaghṛta (141);¹⁶⁸ brāhmīghṛta¹⁶⁹ was probably also prescribed, because it is referred to. Śūdras were excluded from the use of this brāhmīghṛta. Particularly recommended is a recipe called rājataila, which proved to be salutary to the sons of Ikṣvāku, Subāhu, Sagara, Nahuṣa, Dilīpa, Bharata and Gaya.¹⁷⁰ Finally, a tricycle (tricakra phakkarathaka) is described as a tool that is helpful to children suffering from phakka. The same chapter describes deafness (bādhīrya) and dumbness (mūkatva), originating from a defect in either the one or the other half of the organ of speech.

The last chapter of the Cikitsasthāna is concerned with the treatment of disorders in wet-nurses (142–146).

The Kalpasthāna of the *Kāśyapaśaṃhitā* is not devoted, as the corresponding sections of the *Caraka-* and *Bhelasāṃhitā* are, to drugs which have a śodhana (emetic or purgative) action, but deals with diverse subjects.

Chapter one (170–174) is concerned with fumigations (dhūpa),¹⁷¹ especially to be employed with the aim of warding off demons afflicting children. Substances of animal origin are important ingredients of these dhūpas, many of which have names. Three types of dhūpa are mentioned: dhūpa, anudhūpa and pratidhūpa. A story is told about Agni who bestowed the formulae of the dhūpas to the sages in order to protect children. A long mantra should be recited to make the treatment more successful (173).¹⁷² An āgneya dhūpa (170) is regarded as particularly suitable to brāhmaṇas, whereas another dhūpa, called brāhma (171), may be prescribed to brāhmaṇas, kṣatriyas and vaiśyas.¹⁷³

Chapter two (174–181) is on the mythical origin of garlic (laṣuna) and its uses in medicine.¹⁷⁴ Garlic is said to originate from drops of the amṛta which fell on the earth when Indrāṇi belched the amṛta forth that Indra had made her drink in order to cure her infertility. The properties of laṣuna, as described in the *Kāśyapaśaṃhitā* (175), do not completely agree with those mentioned in other treatises.¹⁷⁵ The medicinal effects are mostly those found in a rasāyana. Many rules are given which pertain to the diet, etc., to be observed after the consumption of garlic. Rituals connected with laṣuna are also described, in particular a garlic festival (gandhamaha; 180);¹⁷⁶ this festival owes its origin to Rudra, who expounded its beneficial effects to Bhadrakālī Umā¹⁷⁷ on an occasion when he, incognito, begged for alms in the Devadāru forest;¹⁷⁸ the garlic fes-

tival was instituted on this occasion as a means to deliver the wives of the sages from their childlessness (180–181).¹⁷⁹

Chapter three (kaṭutailakalpa; 181–183)¹⁸⁰ opens with the claim that kaṭutaila (mustard oil) is the most excellent medicine in the treatment of plīhan (splenomegalia). Recipes are given against plīhan, rules about their dosage, etc. Chapter four (ṣaṭkalpa; 183–185) is about the treatment of eye diseases in children.¹⁸¹ Chapter five (185–187) is concerned with the properties of śatapuspā and śatāvarī and their uses in medicine.

Chapter six, the Revatīkalpa (187–202), forms one of the most interesting parts of the *Kāśyapaśaṃhitā*. Partly in prose of an archaic type, partly in verse, this long chapter deals with female demons, called Jātahāriṇī, who are manifestations of Revatī.¹⁸² After a long mythological excursus, beginning with Prajāpati's creative acts, a story is told about an evil being (asurakanyā) called Dīrghajihvī,¹⁸³ who was destroyed by Revatī. This introduces Revatī as the chief character of the chapter. She is transformed into Jātahāriṇī, a being killing children in their mothers' womb. Her names are Revatī, Pilipicchikā, Raudrī, and Vāruṇī.

The Revatīkalpa proceeds with describing which types of bad behaviour in women provoke Revatī's wrath and lead to misfortune for the unborn child. Behavioural rules and rituals serving to ward off the attacks of Revatī are described, as well as many patterns of behaviour resulting in such an attack. The disorders in women caused by Revatī are many and manifold. The symptoms of these disorders are listed, together with the names designating both the women suffering from them and the Jātahāriṇīs.¹⁸⁴ Śuṣkarevatī, Kaṭambharā, Revatī, Vikūṭā, Parisrutā, Aṇḍagnī, Durdharā, Kālarātrī, Mohinī, Stambhanī, Kroṣanā, and Nākinī are characterized by menstrual disorders or the death of the unborn child. The names of the fifteen Jātahāriṇīs causing the death of the child on the first up to the fifteenth day of its life are Piśāci, Yakṣī, Āsurī, Kali, Vāruṇī, Ṣaṣṭhī, Bhīrukā, Yāmyā, Mātāṅgī, Bhadrakālī, Raudrī, Vardhikā, Caṇḍikā, Kapālamālinī, and Pilipicchikā. Jātahāriṇīs leading to the child's death in a later period are Vāśyā, Kulakṣayakarī, Puṇyajanī, Pauruṣādini, Saṃdamśī, Karkoṭakī, Indravaḍavā, and Vaḍavāmukhī. Some verses on the origin of twins and their characteristics follow.

The discourse on Revatī continues with an exposition by Kāśyapa on the three forms she assumes, daivī, mānuṣī and tiraścīnī, which enable her to pervade the worlds of the gods, human beings and animals. The homage paid to Revatī by the gods and the sages (Kāśyapa included) made her endow them with numerous and prosperous offspring. This tale introduces the Revatīkalpa sensu stricto, as expounded by Kāśyapa to his pupils.

Kāśyapa tells Vṛddhajīvaka that women who do not observe the rules of dharma may be harassed by Revatī and therefore require expert medical care. Women belonging to one of the four varṇas or a mixed class (varṇāntara), as well as women called līnginī and kārūkī, are liable to Revatī's attacks. The Revatīkalpa describes in which way these attacks manifest themselves in each of the classes of women enumerated and gives details on the expiation (prāyaścitti) that is required. This part of the Revatīkalpa contains long lists of mixed castes, of female ascetics (līnginī),¹⁸⁵ and of women belonging to various castes of artisans (kārūkī) (195).

This section on the mānuṣī form of Revatī is followed by one on her tiraścīnī form,

its five varieties (śakunī, catuṣpadī, śarpā, matsyī, vanaspatī) and numerous subvarieties (196–197); this section argues strongly in favour of ahimsā, because the intentional killing of animals incenses particular forms of Revatī. The Revatīkalpa ends with a list of symptoms presented by children afflicted by Revatī (198–199) and an elaborate description of the ritual (varaṇabandha) to be performed by the physician in order to save these children.¹⁸⁶ Successful performance of the rite demands that the physician be conversant with the mātaṅgī vidyā,¹⁸⁷ obtained by the great sage Mataṅga, Kaśyapa's youngest son,¹⁸⁸ from Brahmā. The effects of this powerful vidyā are extolled. Next to it, the rudramātaṅgī and its beneficial effects are described.¹⁸⁹

Chapter seven (bhojanakalpa; 202–213) is about feeding habits and foods; numerous countries are mentioned, together with the foods most suitable to their inhabitants (206–207); details are given on the uses of maṇḍa,¹⁹⁰ yavāgū (gruel), milk, and sugar-cane juice.

Chapter eight (viśeṣakalpa; 213–225) has saṁnipāta fevers as its subject, their varieties, and their treatment. Thirteen types of saṁnipātajvara are mentioned; due to the lacunary state of the text, the descriptions have only partially been preserved (214–217).¹⁹¹ Some interesting verses (217) show that the aetiology of the saṁnipāta fever called kūṭapākala was a hotly debated issue.¹⁹² A previously healthy person, suddenly presenting signs pointing to excitement of all three doṣas, will be covered with boils (piḍakā) called viśaṣaṁjñaka (217).¹⁹³

Chapter nine (saṁhitākalpa; 225–227) is, as already mentioned, about the origin and contents of the *Kāśyapasamhitā*.

The Khilasthāna begins with a chapter on irregular fevers (viśamajvaranirdeśīya; 227–234). Vṛddhajīvaka puts questions to Kaśyapa on the aetiology of these fevers, because this subject is absent from the chapter on the treatment of fevers in general. Four irregular fevers are described, satataka, anyedyuṣka, tṛtīyaka and caturthaka, to which pretajvara and grahajvara are added. Satataka has the nature of Agni, dvitīyaka (= anyedyuṣka) that of Vāyu, while tṛtīyaka and caturthaka are associated with the Viśvedevāḥ and Īśāna. Chapter two (viśeṣanirdeśīya; 234–240) proceeds with describing fevers and their treatment; groups of drugs are enumerated which are śodhana, śamana and śamanaśodhana (238–239; 2.57–62ab).

Chapter three (bhaiṣajyopakramaṇīya; 240–249) deals with the classification of diseases; a bodily disease is called vyādhi, a mental disorder ādhi¹⁹⁴ (241; 3.19); pharmaceutical preparations of vegetable origin are divided into seven types: cūrṇa, śītakaṣāya, svarasa, abhiṣava, phāṇṭa, kalka, and kvātha (242–243; 3.35–43ab);¹⁹⁵ the periods of time at which a medicine should be taken (auśadhakāla) are ten in number (243–244; 3.43–52);¹⁹⁶ the stages of the human life cycle are discussed (245–246; 3.71ab–76); much attention is given to the dosages of medicines to be administered to children (246–248; 3.77–102ab).¹⁹⁷

Chapter four (yūṣanirdeśīya; 249–255) is about medicinal soups (yūṣa) and related preparations (peyā, yavāgū); twenty-five different soups are described (250–251; 4.19cd–24ab), divided into two (251; 4.24cd–25ab)¹⁹⁸ or three (251; 4.25cd–26ab)¹⁹⁹ groups.

Chapter five (bhojyopakramaṇīya; 255–260) is concerned with diet, sātmya, the

tastes, articles of food that may or may not be combined,²⁰⁰ etc.; the combination of milk and fish is, as in the *Carakasamhitā*,²⁰¹ advised against.

Chapter six (rasadoṣavibhāgiya; 261–268) distinguishes sixty-two disturbed states of the doṣic equilibrium (261–262; 6.5–11);²⁰² the tastes and their combinations (their total number is sixty-three) are also listed (262–263; 6.12–19);²⁰³ further subdivisions of the conditions which may prevail among the doṣas and the tastes make their total numbers into 4,160 and 3,073 respectively (265–266; 6.48–70ab).

Chapter seven (saṁsuddhivēṣeṣaṇīya; 268–277) is mainly devoted to treatment with emetics and clysters.

Chapter nine (raktagulmaviniścaya; 286–292)²⁰⁴ is entirely devoted to raktagulma, a disease restricted to women, characterized by symptoms simulating pregnancy. The *Kāśyapasamhitā* is the only treatise known with a separate chapter on this disorder.²⁰⁵ The chapter is of importance because it contains much material on female physiology and some related topics. The human body is described as possessing seven receptacles (āśaya), for faeces, urine, parasites (krimi), undigested (āma) and digested (pakva) food, kapha, and vāta; an eighth receptacle, the uterus (garbhāśaya), is present in women (9.16).

Chapter ten (antarvatnīcikitsita; 293–304)²⁰⁶ is about diseases of pregnant women and their treatment; diseases mentioned are: jvara (293–297; 10.4–65), atisāra, (pra)vāhikā, parikartikā (10.102cd–106ab),²⁰⁷ pārśvopagraha, mukhapāka, ākṣepa, apātānaka, chardi (10.118–127ab),²⁰⁸ kāmālā, hṛcchūla (10.128cd–131ab),²⁰⁹ kāsa, śvāsa, ūrdhvānila (10.141),²¹⁰ hikkā, mūtragraha, gulma, vātaroga, granthi, piḍakā, śoṭha, rohiṇī, bhagna, and sarpadaṁśa (snake-bite); the remaining part of the chapter is filled with signs pointing to some disorder of pregnancy, and with aṣṭas.

Chapter eleven (sūtikopakramaṇīya; 304–316)²¹¹ defines the term sūtikā (11.6);²¹² a list of sixty-four puerperal diseases is presented (11.7–13);²¹³ the three types of country (deśa) are mentioned, together with the treatment appropriate to women living in these regions (11.28–33); due consideration should be given to mleccha (i.e., non-Aryan) women and their habits (11.34–36);²¹⁴ six types of puerperal fevers are referred to, caused by vāta, pitta, kapha, saṁnipāta, lactation, and grahas (11.39–69); a large part of the chapter is devoted to the treatment of puerperal fevers.²¹⁵

Chapter twelve (jātakarmottara; 316–319) is concerned with rituals to be performed in the first year of life and the treatment of infants;²¹⁶ at the end of the first month the child is shown the sun and the moon; in the fourth month the child is taken to a temple where several deities are worshipped (niṣkramaṇasaṁskāra); in an interesting ritual to be performed in the sixth month of life, Prthivī is invoked, while the child is surrounded by auspicious objects and all kinds of toys; the annaprāśana, the ceremony of giving cooked food to the child for the first time, should take place not in the sixth, but in the tenth month, after the eruption of the teeth; fruit juices may already be administered in the sixth month.²¹⁷

Chapter thirteen (kukkunākacikitsita; 319–324)²¹⁸ deals with an eye disease in children, called kukkuṇaka,²¹⁹ ascribed to unhealthy dietary habits of the person nursing the child, and said to be caused by kapha and blood; the symptoms described resemble those of a conjunctivitis.²²⁰

Chapter fourteen (visarpacikitsita; 324–331),²²¹ describing visarpa (erysipelas) and its treatment, distinguishes seven varieties of this disease: three caused by one doṣa, three by a combination of two doṣas, and one by all three doṣas.²²²

Chapter fifteen (carmadalacikitsita; 331–335)²²³ is entirely devoted to the disease called carmadala, already mentioned in the chapter on the treatment of kuṣṭha (kuṣṭhacikitsita) as one of the nine incurable forms of that disease.²²⁴ The *Kāśyapasaṃhitā* is the only medical treatise known that has a separate chapter on carmadala. The characterization of the disease in the Khilasthāna does not tally with what is said about it in the kuṣṭhacikitsita chapter. Chapter fifteen of the Khilasthāna contains lengthy descriptions of the aetiology, symptomatology and treatment of the varieties of carmadala caused by vāta, pitta and kapha. A sāmnipātika variety is also described, but not its treatment, since it is thought to be incurable.²²⁵

A hereditary form of carmadala (brought about by kulapravṛtti), unknown from other treatises, is referred to in the description of the general aetiology of carmadala.

Chapter sixteen on amlapitta (335–339) has no parallel in the *Caraka-* or *Suśrutasaṃhitā*, nor in the works ascribed to Vāgbhaṭa.²²⁶ The description of this disease appears to be independent of the *Hārītasamhitā* and *Mādhavanidāna*. In contrast with the *Mādhavanidāna* and the *Hārītasamhitā*, the *Kāśyapasaṃhitā* distinguishes three varieties of amlapitta, caused by vāta, pitta and kapha respectively.²²⁷ The complications (upadrava) of the disease, which is also called śuktaka (338; 16.43), are added (16.49). A noteworthy feature in its treatment is the advice (16.44cd–45) to move to a jāṅgala country, the most healthy one, if the disorder, prevalent in ānūpa countries, is not cured by a long-term treatment by means of jāṅgala remedies.

Chapter seventeen on local swellings (śothacikitsita; 339–345) distinguishes four doṣic varieties, caused by vāta, pitta, kapha, and all three doṣas, a fifth one of traumatic origin (āgantū), and a sixth variety caused by poison (viṣa).²²⁸

Chapter eighteen (śūlacikitsā; 345–349) is remarkable because the *Carakasamhitā*, *Suśrutasaṃhitā*, and the works of Vāgbhaṭa do not have a separate chapter on this group of disorders.²²⁹ The *Kāśyapasaṃhitā* describes three varieties of śūla, caused by vāta, pitta and kapha.²³⁰

Chapter twenty (aṣṭajvaracikitsita; 349–353) contains some additional material on the treatment of fevers.

Chapter twenty-one (madhuviśeṣaṇīya; 353–354), very fragmentarily preserved, deals with the properties of honey and its uses, chapter twenty-two (kṣīraguṇaviśeṣīya; 354–356) with the properties and uses of milk,²³¹ chapter twenty-three (pāṇiyaguṇaviśeṣīya; 356–359) with the properties and uses of water,²³² chapter twenty-four (māṃsaguṇaviśeṣīya; 359–363) with the properties and uses of the flesh of a long series of animals.²³³

Chapter twenty-five, the last chapter (deśasātmīya; 363–364), fragmentarily extant, is about the dietary habits of the inhabitants of various countries and the diseases prevalent in those countries, a subject also dealt with in the bhojanakalpa chapter of the *Kalpasthāna* (206–207).²³⁴

Some noteworthy nosological terms are: ādhyavāta (349), apātānaka (167), brahṇa (144), dhānvīraka (212),²³⁵ garbhadāha (17), hanusaṃdamśa (185),²³⁶ kakṣyā

(331),²³⁷ kaṭukinī (252),²³⁸ kotha (329), kothaka (322),²³⁹ mahattva (26),²⁴⁰ masūrikā (331), pillikā (320; 321), pilliman (184; 185),²⁴¹ śākhāvāta (305), śākhāvāyu (97), utpātaroḡa (333),²⁴² uthāna (349),²⁴³ upagraha (170), upaśoṣa (176), and visphoṭa (331).

Names of plants not occurring in the *Bṛhatrayī* or only rarely found there are:²⁴⁴ ādhyā (351),²⁴⁵ ajaṭī (101; 110),²⁴⁶ ambara (170),²⁴⁷ barhiṣṭha (314),²⁴⁸ bhadrarohiṇī (314; 348),²⁴⁹ bhekarāja (320),²⁵⁰ bhekarājī (320), devapuṣpa (284),²⁵¹ devapuṣpā (314), devapuṣpaka (314; 344), devatāḍaka (311; 350),²⁵² ekaparnī (141),²⁵³ enīyaka (347),²⁵⁴ gandhapalāśa (348),²⁵⁵ gaurī (5),²⁵⁶ gavādani (342),²⁵⁷ girikadambaka (101; 295),²⁵⁸ hastikarṇapalāśa (344),²⁵⁹ hinguparnī (335),²⁶⁰ iksugaṇḍa (327),²⁶¹ kairava (311),²⁶² kākalā (344),²⁶³ kaṇḍopapuṣpī (223),²⁶⁴ karavindī (295),²⁶⁵ kharabusa (168; 169),²⁶⁶ kūlaka (169),²⁶⁷ maruvā (312),²⁶⁸ mātar (183),²⁶⁹ māṭṭkā (170),²⁷⁰ muktiphala (333),²⁷¹ nadībhallātaka (104),²⁷² nāḍikā (7),²⁷³ nāgavīryā (144),²⁷⁴ nameru (86; 170; 172),²⁷⁵ nigarbhā (121),²⁷⁶ nīlaspanda (234),²⁷⁷ nimandaka (180),²⁷⁸ pravaraṇva (346),²⁷⁹ pravaraṇva (159),²⁸⁰ puṣpaka (183; 184), rocaka (351),²⁸¹ sāmaka (314),²⁸² samudrāntā (169),²⁸³ śaraṭa (301),²⁸⁴ śatru (322),²⁸⁵ siddha (322),²⁸⁶ śirivārikā (168; 347),²⁸⁷ śītaka (343),²⁸⁸ śītaśiva (104),²⁸⁹ sitavārikā (119),²⁹⁰ śrīvārikā (107),²⁹¹ suvarcikā (101; 254),²⁹² svādukaṇṭaka (335),²⁹³ tribhaṇṭī (234),²⁹⁴ uṣṭralomikā (311; 350),²⁹⁵ varcīva (326; 327; 342; 350),²⁹⁶ vasuka (two types are mentioned; 121),²⁹⁷ veḍa (334),²⁹⁸ vīralla (104),²⁹⁹ vitūṃaka (334),³⁰⁰ vṛṣatparṇī (254),³⁰¹ vyāghātaka (328),³⁰² yakṣā (350),³⁰³ yakṣaguṇā (311),³⁰⁴ and yātumūla (343).³⁰⁵

Date

The story about the origin and transmission of the *Kāśyapasaṃhitā*, found in the last chapter of the *Kalpasthāna*, discloses that the text as it has come down to us is the revised version of an older treatise that contained Kaśyapa's teachings on kaumārabhyāsa, passed on to Vṛddhajīvaka and some of the latter's fellow pupils, among whom Vāryovida is mentioned by name.³⁰⁶

The Kaśyapa of the *Kāśyapasaṃhitā* is one of a series of authorities of this name. Sanskrit medical literature refers to a Kaśyapa, who is sometimes confused with Kaśyapa.³⁰⁷ The *Kāśyapasaṃhitā* designates Kaśyapa with the patronymic Mārīca, in accordance with a tradition, recorded in the epics and the Purāṇas, that Kaśyapa was a son of Mārīci.³⁰⁸ It is, however, the only medical treatise that calls him Prajāpati.³⁰⁹ A Kaśyapadeva, to be worshipped, along with Aditi, Indrāṇī, Indra and the Aśvins, at the approach of a woman's confinement, is mentioned in the jātisūtrīya chapter (85).

Kaśyapa's name is replaced by that of Kāśyapa in a short treatise with the title *Kāśyaparsiproktatrīcīkīṭṣāsūtra*, lost in its Sanskrit original, but preserved in a Chinese translation that forms part of the *Tripitaka*.³¹⁰ P.C. Bagchi,³¹¹ who studied this work, affirms that it was translated by Dharmadeva or Dharmabhadra, who went to China in A.D. 973 and stayed there until his death in A.D. 1001.³¹² The text, which mentions Kāśyapa as the teacher and Jivaka as the pupil, deals with prenatal care and describes disorders of pregnancy and their treatment. P.C. Bagchi considers it to be an extract from the lost portion of the jātisūtrīya chapter of the *Kāśyapasaṃhitā*, since it deals

with matter found in the chapters of the same name of the *Caraka-* and *Bhelasamhitā*. The prescriptions of the *Strīcikitsāsūtra* are more elaborate than those of Caraka and Bhela. Particular to it are prescriptions for the tenth, eleventh and twelfth months of pregnancy.

The *Kāśyapasamhitā* is the only medical treatise that presents Kaśyapa as a specialist in *kaumārābhr̥tya*, whereas many medical authors and works quote from or refer to a specialist in this branch of āyurveda who was called Kaśyapa.³¹³ As we have seen, the *Strīcikitsāsūtra* conforms to this tradition. An authority on *kaumārābhr̥tya* called *Vṛddhakāśyapa* is also known from quotations.³¹⁴

The confusion of Kaśyapa and Kāśyapa has a long history, as attested by an anonymous monograph on fevers, the *Jvarasamuccaya*, a work dating from before A.D. 924. This work contains a number of verses, attributed to Kāśyapa, which closely agree with lines found in the text of the *Kāśyapasamhitā*.³¹⁵

The other quotations from the specialist in *kaumārābhr̥tya* called Kaśyapa cannot be traced in the preserved parts of the *Kāśyapasamhitā*, which, if the possibility that they are in toto from lost parts of the treatise is discarded, proves that a different version, no longer extant, has been current.

The Kaśyapa of the *Kāśyapasamhitā* is by a number of, chiefly Indian, authors regarded as a very ancient authority, contemporary of Ātreya Punarvasu.³¹⁶ In my opinion, it is not open to doubt that this great Kaśyapa, the *Prajāpati*, figures in the work to give it the weight of antiquity and has no implications for its chronological position.³¹⁷

Kaśyapa's chief pupil, *Vṛddhajīvaka*, although by some considered to be identical with the *Jīvaka* of Buddhist literature,³¹⁸ is clearly a different person.³¹⁹ The *Jīvaka* of Buddhist literature was a surgeon, whereas *Vṛddhajīvaka* was trained in *kaumārābhr̥tya*.³²⁰ A complication that may have contributed to this confusion is the fact that *Vṛddhajīvaka* is referred to as *Jīvaka* in *Anantakumāra's Yogaratnasamuccaya*, the *Bower MS*, *Ḍaḥaṇa's Nibandhasaṃgraha*, the *Strīcikitsāsūtra*, and *Vaṅgasena's Cikitsāsārasaṃgraha*.³²¹

The names of *Jīvaka* and *Vṛddhajīvaka* are connected with each other by P.V. Sharma,³²² who supposes *Vṛddhajīvaka*, in conformity with his name, to be somewhat earlier than *Jīvaka*.

The date of the version of the *Kāśyapasamhitā* from which the untraced quotations derive cannot be established. The same applies to the treatise before its revision by Vātsya.³²³ The work rewritten by Vātsya may have had *Vṛddhajīvakiyatantra* as its title, as borne out by some colophons,³²⁴ which are of the same type as those found in the *Carakasamhitā*, revised by *Dr̥ḍhabala*.³²⁵

Vātsya, who introduces himself in the last chapter of the *Kalpasthāna*, which was probably the final chapter of the work before he began revising and completing it, is, on account of his association with the yakṣa *Anāyāsa*, who protected the city of *Kauśāmbī*, the capital of *Vatsadeśa*,³²⁶ supposed to have resided there.³²⁷ Others interpret the name as an indication of his having been a brāhmaṇa of *Vatsagotra*, in the same way as *Vātsyāyana*, the author of the *Kāmasūtra*.³²⁸

Due to Vātsya's activity, the sections of the *Kāśyapasamhitā* from the *Sūtrasthāna* up to the *Kalpasthāna* consist of two layers which can, unfortunately, not be distin-

guished from each other. The *Khilasthāna*, an appendix that resembles the *Uttaratantra* of the *Suśrutasamhitā*, was probably in its entirety added by Vātsya,³²⁹ as indicated by its contents and by the colophons which no longer refer to a *pratisaṃskartar*. Many chapters of the *Khilasthāna* mention that a particular subject, not dealt with in the preceding sections, will be expounded.³³⁰ Moreover, some subjects already dealt with in the *Cikitsasthāna*, are discussed again in the *Khilasthāna*.³³¹

The date of Vātsya's revised version of the *Kāśyapasamhitā* is elucidated by the quotations in the *Jvarasamuccaya*, the MS of which was completed in A.D. 924.³³² A version of the *Kāśyapasamhitā* related to the text known to us was apparently available to the author of this *Jvarasamuccaya*, who apparently lived some time before A.D. 900. The *Kāśyapaṣiproktastrīcikitsāsūtra* may point to a version being known in the tenth century. Some statements on the qualities of breastmilk, attributed to *Jīvaka* by *Vaṅgasena* (*strīroga* 341–344), suggest that this author was acquainted with the *Vṛddhajīvakiyatantra*, because the relevant verses may have formed part of chapter nineteen of the *Sūtrasthāna* of the *Kāśyapasamhitā*. *Vaṅgasena's* work contains some more verses, not ascribed to any authority, which are found in the *Kāśyapasamhitā*.³³³

More evidence concerning the date of Vātsya's revised version of the *Kāśyapasamhitā* can be collected only from its contents. The references to Jainism³³⁴ and Buddhism³³⁵ are not of much avail for chronological purposes. Hinduism prevails in the work. The type of Hinduism of which the *Kāśyapasamhitā* gives evidence is in favour of dating it to the Gupta period.³³⁶ In support of this are the Tantric elements present: *Bhadrakālī* is mentioned (180; *laṣunakalpa* 108); Tantric mantras are employed;³³⁷ the *mātāṅgī vidyā* is referred to (199–200; *Revatīkalpa* 80);³³⁸ the *Siddhas* should be honoured by a physician (37; *Sū.26.4*); *siddhamantras* are mentioned (230). Indicative of the same age are the social structure, reflected, for example, in the numerous references to *varṇas*, castes and professions,³³⁹ the increased influence of popular religion³⁴⁰ in comparison with the *Carakasamhitā*, *Suśrutasamhitā*, and the works of *Vāgbhaṭa*, the geographical terms,³⁴¹ and the names of peoples such as the *Hūṇas*.³⁴²

Nosological features with a bearing on the chronological position of the *Kāśyapasamhitā* are the separate chapters of the *Khilasthāna* on *śūla* and *amlapitta*, diseases not yet described as distinct nosological entities by Caraka, Bhela, *Suśruta*, and *Vāgbhaṭa*, but appearing as such in the *Mādhavanidāna*, where, however, the descriptions are so much different that the *Kāśyapasamhitā* and *Mādhavanidāna* may be regarded as completely independent in this respect. The absence of any influence from the side of the *Mādhavanidāna* strengthens the view that the *Kāśyapasamhitā* is earlier and may tentatively be placed in about the seventh century.³⁴³

P.V. Tewari³⁴⁴ assumes that someone made changes in the text rather late, in the eleventh to thirteenth century. This unknown reviser made Vātsya take part in a discussion; he also added three lines to the end of chapter nineteen of the *Sūtrasthāna*.

Chapter 4

Hārītasamhitā

The *Hārītasamhitā*^{1,2} is one of the complete textbooks that deal principally with internal medicine (kāyacikitsā); it differs considerably from the *Caraka-* and *Bhelasamhitā* which focus on the same division of āyurveda.

Contents

The *Hārītasamhitā* is written in the form of a dialogue between Ātreya³ and Hārīta.⁴ The treatise is designated as *Ātreyaśāhita Hārītottara* in nearly all the chapter colophons, with only one exception (I.2), where it is referred to as *Vaidyasarvasva*. Hārīta, sometimes addressed as Putra(ka) (I.1.8; III.5.22; III.8.11),⁵ receives the teachings of Ātreya, also referred to as Atri (V.1.1; pariśiṣṭādhyaḥ) and pitar (I.8.5), who is surrounded by students, on the northern slopes of the Himālayas (I.1.2–5; V.1.1).

The work is almost entirely in verse, apart from a portion of the Śārīrasthāna, the ritual prescriptions,⁶ and the mantras.

The internal arrangement diverges considerably from that of the other samhitās. The number of chapters is 102; one additional chapter, the pariśiṣṭādhyaḥ, is found at the end. The chapters are distributed over six sections (sthāna), the names of which are given in the text (I.2.3–4) and in part of the colophons of sections IV, V and VI. The name of each chapter is found in the colophon only, in contrast with the *Caraka-*, *Suśruta-*, *Bhela-*, and *Kāśyapasamhitā*, where the title of a chapter figures at the beginning. A detailed table of contents is absent.⁷

The *Hārītasamhitā* is composed of the following sections: I, annapāna, twenty-three chapters;⁸ II, ariṣṭa, nine chapters; III, cikitsita, fifty-eight chapters; IV, sūtra, six chapters; V, kalpa, five chapters; VI, śārīra, one chapter.⁹

The subjects of the chapters of the Annapānasthāna are: (1: vaidyaguṇadoṣaśāstrapāṭhanavidhi): after the maṅgala (to Śiva) and the introductory dialogue between Ātreya and Hārīta, an exposition is given by Ātreya on the extent of the medical science, followed by the announcement that he is going to teach a very concise version of it;¹⁰ the next subjects are the qualities a vaidya should possess, the way āyurveda should be studied, and the circumstances prohibiting its study;¹¹ (2: cikitsāsamgraha): the eight sections of the work, the aṅgas of āyurveda, and the supplementary aṅga (upāṅga); (3: vaidyaśikṣāvidhāna): generalities on the physician and his activities; (4: ṛtucaryā): the types of country, the three divisions of time, the regimen during the seasons; (5: doṣaprakopa): the stages of life (vayas), the constitutions (prakṛti), the

different kinds of vāyu (= vāta), the causes of excitement of vāyu, pitta and kapha; (6: saḍrasavarṇana): the six tastes.

Chapters seven to twenty-three are devoted to the medicinal properties of foods and drinks:¹² water (7: jala), milk and dairy produce (8: kṣīra), urine (9: mūtra), products of the sugarcane (10: ikṣu), kārjika (11), maṇḍa (12), yūṣa (13), fatty substances (14: tailavasā), grain (15: dhānya), vegetables (16: śāka), fruits (17: phala), honey (18: madhu), alcoholic drinks (19: madya), flesh of quadrupeds (20: catuṣpadānām māmsavargah), flesh of terrestrial animals, mainly birds (21: sthalacarāṇām māmsavargah), flesh of aquatic animals (22: jalacarāṇām māmsavargah), and prepared foods, supplemented with rules concerning diet (23: annapāna).

The Ariṣṭasthāna¹³ deals with diseases resulting from bad karman (1: pāpadoṣapratikāra),¹⁴ dreams and their prognostic meaning (2: svapna),¹⁵ signs foreboding death (3: svāsthyāriṣṭa),¹⁶ unfavourable prognostic signs in a long series of diseases (4: vyādhyāriṣṭa),¹⁷ alterations of the sensorial faculties (5: pañcendriyavikāra),¹⁸ afflictions caused by the nakṣatras (6: nakṣatrajñāna), oblations into the sacrificial fire (7: homavidhi), prognostic signs connected with the messenger (8: dūtaparīkṣālakṣaṇa),¹⁹ prognostic signs connected with birds (9.1–12: śakuna)²⁰ and with objects seen by the physician on his way to a patient (9.13–18: darśanāriṣṭa).²¹

Chapter one of the Cikitsasthāna is concerned with generalities about fevers and their treatment with drugs and diet (1: bheṣajaparijñānavidhi); the remaining chapters are devoted to diseases and their treatment (2–58).²²

The Sūtrasthāna is devoted to weights and measures (1: tulāmāna), the preparation of medicated oils (2: tailapāka), clysters (3: nirūhabastikarman), sudation (4: svedana), bloodletting (5: raktāvasecana), and the application of leeches (6: jalaukacāra).

The chapters of the Kalpasthāna are about: (1) harītakīkalpa, (2) triphalākavātha, (3) various preparations with harītakī as the main ingredient (harītakīkalpavarṇanabheda), (4) rasonakalpa, (5) guggulukalpa.

The Śārīrasthāna describes the nature of the human body (dehaprakṛti), the origin of twins (apatyayugma) and individuals who are neither male nor female (napuṃsaka), and the formation of human beings (sattvasambhava).

The pariśiṣṭādhyaḥ describes the termination of Hārīta's instruction by Ātreya and extols a number of medical authorities.

As already mentioned, the structure of the *Hārītasamhitā* and the distribution of the subject-matter disagree with the samhitās of Caraka, Bhela, Suśruta and Vāgbhaṭa. The differences are so considerable that Hārīta's treatise can hardly be regarded as belonging to the school of Ātreya, in spite of the latter's position as Hārīta's teacher.²³

The first section, the Annapānasthāna, contains the larger part of the material commonly found in a Sūtrasthāna, while the remaining general subjects are treated in section four, the Sūtrasthāna.²⁴ The Ariṣṭasthāna corresponds to the Indriyasthāna of the *Caraka-* and *Bhelasamhitā*. A Nidānasthāna is absent; the nidāna of the diseases is described in the Cikitsasthāna.²⁵

The order of the diseases in the Cikitsasthāna does not follow one of the earlier patterns and is peculiar to the *Hārītasamhitā*. The aṅgas of āyurveda are represented in this section as follows: kāyacikitsā, 1–39; śālākya, 40–42 and 44–46; rasāyana, 43;

vājīkaraṇa, 47; kaumārabhṛtya, 48–54; bhūtaavidyā, 55;²⁶ viṣatantra, 56; upāṅga, 57–58;²⁷ the material on śālya is scattered over the kāyacikitsā chapters and is found in particular in chapters 35 and 38.

An unusual feature is the presence of separate chapters on śūla (7), dāha (17), ā-mavāta (21), amlapitta (24), upasarga (34), ślīpāda (36), arbuda (37), gaṇḍamālā and lūtā (38), bhrūdoṣa (41), indralupta (43), and agnidagdha (58).

The *Hārītasamhitā* describes a number of diseases which are otherwise unknown.²⁸ Diseases not dealt with are ānāha, arocaka, bhagandara, hikkā, hṛdroga, kṣudraroga, medoroga, śūkadoṣa, svarabheda, śvāsa, and upadamśa.²⁹

Verses about what is wholesome (pathya) and unwholesome (apathya) in a particular disease are, as is usual in later āyurvedic works, found at the end of each chapter of the *Cikitsasthāna*.

The Sūtra- and Śārīrasthāna of the *Hārītasamhitā* follow upon the *Cikitsasthāna* instead of, as usual, preceding it.

Authorities mentioned in the *Hārītasamhitā*, apart from those named in the pari-śiṣṭādhyāya, are: Agastī,³⁰ Agastya,³¹ Atri,³² Kāṅkāyana,³³ Kṛṣṇātreya,³⁴ and Parā-śara.³⁵

Quotations and references³⁶

The following authors and works quote Hārīta or refer to him: Ādhamaḥ, the *Amṛ-tasāgara*,³⁸ Ananta's *Pratāpakalpadruma*,³⁹ Anantakumāra,⁴⁰ Aruṇadatta,⁴¹ Āryadāsa Kumārasimha's *Kvāthamaṇimālā*, the *Āyurvedābhisāra*⁴² and its commentary,⁴³ Śrīvāṇeśvara Bhaṭṭācārya's *Rasaratnāḍīpikā*,⁴⁴ Bhāvamiśra,⁴⁵ *Bheṣajakalpasārasaṃ-graha*,⁴⁶ *Bheṣajjamañjūsānnaya*, Bower MS,⁴⁷ *Brhannighaṇṭurātṇākara*,⁴⁸ Cakra-pāṇidatta,⁴⁹ Cāmuṇḍa,⁵⁰ Candrāṭa,⁵¹ *Carakasamhitā*,⁵² Ḍalhaṇa,⁵³ *Dhanvantari*,⁵⁴ *Dhanvantari's Cikitsākalikā*, Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*, Viśva-nātha Dvivedī's *Rasendrasambhava*,⁵⁵ Gaṅgādhara's *Bheṣajakalpa*, Gaṅgādhara's commentary on the *Carakasamhitā*,⁵⁶ *Garuḍapurāṇa*,⁵⁷ Gopālādāsa's *Cikitsāsmṛta*, Gopālādāsa Vādindra's *Cikitsāsāra*, Govindadāsa's *Bhaiṣajyaratnāvalī*,⁵⁸ Guḷrāj-śarmamiśra's commentary on the *Āyurvedaprakāśa*,⁵⁹ Hamsarāja,⁶⁰ Harṣakīrti,⁶¹ Hemādri,⁶² Hemādri's *Lakṣaṇaprakāśa*,⁶³ Jayaratna,⁶⁴ Jejjata,⁶⁵ Jivānandavidyāsāga-ra's commentary on the *Rasendrasārasaṃgraha*,⁶⁶ *Jvaracikitsita*, *Jvarasamuccaya*,⁶⁷ the *Kairālī* commentary on the Uttarasthāna of the *Aṣṭāṅgahṛdayasamhitā*,⁶⁸ Kalyā-ṇadāsa,⁶⁹ Karandikar's *Nidānāḍīpikā*,⁷⁰ Kṛṣṇadatta,⁷¹ Kṣemaśarman,⁷² Lakṣmaṇapa-ṇḍita's *Yogacandrikā*, the *Mādhavadravayagūṇa*,⁷³ Māgacandradeva, Māṇikyācandra's *Rasāvatāra*,⁷⁴ Meghamuni's *Meghavinoda*,⁷⁵ Nāgaṇātha's *Nidānapradīpa*, Nara-hari's *Vāgbhaṭamaṇḍana*,⁷⁶ Narasiṃha's commentary on the *Mādhavanidāna*, Nā-rāyaṇabhūpati's *Nārāyaṇavilāsa*,⁷⁷ Nīlakaṇṭha's *Basavarājīya*,⁷⁸ Nīscalakara,⁷⁹ Nī-tyanātha's *Rasaratnākara*,⁸⁰ Parameśvara,⁸¹ Paraśurāma's *Rasarājāśiromaṇi*,⁸² Rā-maprasāda's *Rasendrapurāṇa*,⁸³ the *Rasayogasāgara*, Rūpanayana's commentary on the *Yogaśataka*, the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Brhannighaṇṭurātṇākara*,⁸⁴ Śaṃkara's *Vaidyavinoda*,⁸⁵ the *Satkarmāḍīpikā*, Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*,⁸⁶ Śivadāsasena,⁸⁷ Soḍhala,⁸⁸

Śrīkaṇṭhadatta,⁸⁹ Sukhānanda,⁹⁰ Tisaṭa,⁹¹ Toḍara,⁹² Trimalla,⁹³ Tulasīdāsa's *Yogasā-rasamgraha*, Vācaspati,⁹⁴ Vāgbhaṭa,⁹⁵ Vallabhabhaṭṭa's commentary on Śārngadhara's *Jvaratṛiṣṭī*,⁹⁶ Vijayarakṣita,⁹⁷ Vinodālāsena,⁹⁸ *Vīrasimhāvaloka*,⁹⁹ Viṣṇudeva's *Rasarājālakṣmī*,¹⁰⁰ Vopadeva,¹⁰¹ *Yogarātṇākara*,¹⁰² and *Yogāḍīpikā*.

The hārītyāḥ are quoted by Nīscalakara.¹⁰³

A work called *Vṛddhahārīta*¹⁰⁴ is quoted by Anantakumāra,¹⁰⁵ Toḍara,¹⁰⁶ Trima-lla,¹⁰⁷ and in the *Yogarātṇākara*.¹⁰⁸

A treatise called *Brhaddhārīta* is quoted in the *Yuktikalpataru*, attributed to Bho-ja.¹⁰⁹

Quotations attributed to Ātreya or said to be from the *Ātreyasamhitā* may be from the *Hārītasamhitā*, since the work is also referred to as *Ātreyasamhitā*.¹¹⁰

The following authors and works refer to Ātreya¹¹¹ or quote him: Aghoranātha,¹¹² the *Amṛtasāgara*,¹¹³ Anantakumāra's *Yogarātṇasamuccaya*,¹¹⁴ Aśvaghōṣa's *Buddha-carita*,¹¹⁵ the *Āyurvedāgama*,¹¹⁶ Bhānujī Dīkṣita,¹¹⁷ Bharadvāja's *Bheṣajakalpa*,¹¹⁸ Bhāvamiśra,¹¹⁹ Bindu's *Rasapaddhati*,¹²⁰ the Bower MS,¹²¹ the *Brhannighaṇṭura-tṇākara*,¹²² Cakrapāṇidatta,¹²³ Candrāṭa,¹²⁴ the *Carakasamhitā*,¹²⁵ Dāmodara,¹²⁶ Dattarāma,¹²⁷ *Dhanvantari*,¹²⁸ Gaṇeśaśarman,¹²⁹ Gopālādāsa Vādindra's *Cikitsāsā-ra*,¹³⁰ Govindadāsa,¹³¹ Guḷrājśarmamiśra's commentary on the *Āyurvedaprakāśa*,¹³² Hamsarāja,¹³³ Hārāṇacandra,¹³⁴ Harṣakīrti,¹³⁵ Hemādri's *Lakṣaṇaprakāśa*,¹³⁶ Jayara-tna,¹³⁷ the *Kairālī* commentary on the Uttarasthāna of the *Aṣṭāṅgahṛdayasamhitā*,¹³⁸ Kalyāṇadāsa,¹³⁹ Kāśīrāma,¹⁴⁰ Mādhava Upādhyāya,¹⁴¹ Mānakavi,¹⁴² Meghamuni,¹⁴³ Moreśvara,¹⁴⁴ Narahari,¹⁴⁵ Nīscalakara,¹⁴⁶ Raghunātha Paṇḍita,¹⁴⁷ Rājēśvaradatta Miśra,¹⁴⁸ Rāmacandra,¹⁴⁹ Raṅgajyotirvid,¹⁵⁰ the *Rasabhūpati*,¹⁵¹ the *Rasaratnasamu-ccaya*,¹⁵² the *Ratnākaraśūdhayoga*,¹⁵³ the *Sahasrayoga*,¹⁵⁴ the *Śāligrāmanighaṇṭu*,¹⁵⁵ Śivadāsasena,¹⁵⁶ Śivadatta,¹⁵⁷ Soḍhala,¹⁵⁸ Śrīdāsapaṇḍita,¹⁵⁹ Śrīkaṇṭhadatta,¹⁶⁰ Svā-mikumāra,¹⁶¹ Toḍara,¹⁶² Trimalla,¹⁶³ Vāgbhaṭa,¹⁶⁴ the *Vaidyacintāmaṇi*,¹⁶⁵ the *Vai-dyaśāstrapravartakācāryānāmasamuccaya*,¹⁶⁶ Vāṅgasena,¹⁶⁷ Vāsudeva,¹⁶⁸ Vinodālā-sena,¹⁶⁹ the *Vīrasimhāvaloka*,¹⁷⁰ Viṣṇudeva's *Rasarājālakṣmī*,¹⁷¹ Vṛṇḍa,¹⁷² and the *Yogarātṇākara*.¹⁷³

Several versions of a medical work associated with the name of Ātreya have been current, as appears from quotations from *Brhadātreyā*, *Kaṇiṣṭhātreyā*, *Madhyamātreyā*, and *Vṛddhātreyā*.¹⁷⁴

The *Brhadātreyā* is quoted by Toḍara¹⁷⁵ and Trimalla;¹⁷⁶ *Kaṇiṣṭhātreyā*,¹⁷⁷ *Ma-dhyamātreyā*,¹⁷⁸ and *Vṛddhātreyā*¹⁷⁹ are quoted by Toḍara.

These works must be regarded, at least partially, as versions of the *Hārītasamhitā* = *Ātreyasamhitā*, since some of the quotations are traceable.

An *Ātreyanidāna* is mentioned in Lakṣmīkūśala's *Vaidyakasāraratnaprakāśa*.

Quotations from Hārīta and Ātreya that have been traced or that are related to verses occurring in the *Hārītasamhitā* are found in the *Amṛtasāgara*, the *Bhāvaprakāśa* and its glosses, Cakrapāṇidatta's commentary on the *Carakasamhitā*, Cakrapāṇidatta's *Ciki-tsāsāṃgraha*, Dattarāma's *Caryācandrodaya*, the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Br-hannighaṇṭurātṇākara*, Śrīkaṇṭhadatta's commentary on Vṛṇḍa's *Siddhayoga*, and To-ḍara's *Āyurvedasaukhya*.¹⁸⁰

Toḍara's *Āyurvedasaukhya* contains a verse attributed to Atri that forms part of the

Hārītasamhitā.¹⁸¹

Vāsudeva's *Vāsudevānubhava* mentions among its sources Atri, *Bṛhadatri* and *La-ghvatri*, which may be related to the works called *Ātreyasamhitā*, *Bṛhadātreya* and *Ka-niṣṭhātreya*, unless they are versions of the *Atrismṛti*.¹⁸²

An *Atrīsamhitā* was among the sources of Baladeva Prasāda Mīśra's *Āyurvedaci-ntāmaṇi*, Jīvānandavidyāsāgara's commentary on the *Rasendrasārasaṃgraha*, Raṅga-jyotirvid's *Viśārasudhākara*, and Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.¹⁸³

Some verses of the edited text of the *Hārītasamhitā* are also found¹⁸⁴ in the *Bhāva-prakāśa*,¹⁸⁵ *Cakradatta*,¹⁸⁶ *Carakasamhitā*,¹⁸⁷ *Siddhasāra*,¹⁸⁸ *Siddhayoga*,¹⁸⁹ and *Su-śrutasaṃhitā*.^{190 191}

Special features¹⁹²

Although the medical science is said to be eightfold (*aṣṭadhā*), the divisions enumerated and defined are nine in number: śalya or śalyoddharaṇaka, śālākya, kāyacikitsita, agada, bālacikitsita, viṣatantra, bhūtaavidyā, vājīkaraṇa, and rasāyana, while, moreover, a tenth division, called upāṅga, is added to the series; śalya heads the list, in spite of the fact that the *Hārītasamhitā* is mainly devoted to kāyacikitsā; agada deals with diseases of rectum, anal region and bladder (*guḍāmaya*, *bastiruj*), to be treated with the three varieties of clysters (*ūhaka* = *nirūha*, *āsthāpana* and *anuvāsana*); this acceptance of the term agada is peculiar to the *Hārītasamhitā*,¹⁹³ bālacikitsita has the same range as the division usually called *kaumārabhrtya*; the definition of *bhūtaavidyā* refers to possession by demoniacal beings and does not mention *unmāda*, nor *apasmāra*; the supplementary *āṅga* (*upāṅga*) is characterized by the use of cautery (*dagdha*) in the treatment of bruises, wounds, fractures, etc. (I.2). The seasons are described in the following order: rainy season, autumn, winter, cool season, spring, and summer (I.4.19–66).¹⁹⁴ The life cycle of human beings in general is divided into four stages (I.5.1–14).¹⁹⁵ The characteristics of several types of wind are enumerated, according to the points of the compass from which they are blowing, and dependent on contrivances producing a flow of air (I.5.24–42). A disease thought to be caused by a strong wind and appearing in both human beings living together in a settlement and domestic animals, is called *yakṣman* in humans, *tilaka* in cattle, *pāvaka* in elephants, and *vedya* in horses (I.5.48). *Pitta* is the *doṣa* to be protected in particular in elephants, *kapha* in horses, and *vāyu* in human beings (I.5.49). The chapter on the tastes (I.6) employs the terms *lavaṇa* and *kṣāra* as synonyms. Each of the three *doṣas* is thought to be provoked or pacified by two tastes (I.5.2–4).

The chapter on the various kinds of water and their properties (I.7) deals with the subject more extensively than the *Caraka-* and *Suśrutasaṃhitā*,¹⁹⁶ it describes the properties of rainwater falling in particular months (I.7.18–24); the classification of the kinds of water resembles the one found in the *Suśrutasaṃhitā*, but the *Hārītasamhitā* adds an eighth type of *dhāra* water, *vāpyudbhava*,¹⁹⁷ to the seven of *Suśruta* (I.7.35); the verses on the water from rivers (I.7.45–65) mention a large number of names and end with the claim that the total number of rivers is 2,100. The rivers flowing to

the Northeast are Gaṅgā, Sarasvatī,¹⁹⁸ Śoṇā,¹⁹⁹ Yamunā, Sarayū,²⁰⁰ Śacī, Veṇā,²⁰¹ Śārāvātī,²⁰² and Nīlā; the rivers flowing to the eastern ocean are Carmanvatī,²⁰³ Vetravatī,²⁰⁴ Pāravatī,²⁰⁵ Kṣiprā,²⁰⁶ Mahāpadī, Pītā, Mutsakā, Manasvinī, Śevati, Śaivalinī, and Sindhu; flowing to the West are the rivers Tāpī,²⁰⁷ Tāpā, Golomī, Gomati,²⁰⁸ Salilā, Mahī,²⁰⁹ Sarasvatī, and Narmadā;²¹⁰ flowing to the western ocean are the rivers Gautamī,²¹¹ Pūrṇā,²¹² Payasvinī,²¹³ Vetrā, Prañitā,²¹⁴ Varānanā, Droṇā, and Govardhanī; the rivers flowing to the South are Kāverī,²¹⁵ Virakāntā, Bhīmā,²¹⁶ Payasvinī, Vibhāvarī, Viśālā, Govindī, Madanasvasā, and Pārvatī.²¹⁷

The chapter on milk and dairy produce (I.8) has some verses (I.8.2–12) on the physiology of lactation;²¹⁸ the qualities of breastmilk depend on the colour of the skin of the mother or wet-nurse (I.8.14–15ab);²¹⁹ the qualities of the milk of cows of diverse colours are described (I.8.16); the properties of *dadhi* (thick sour milk), produced in each of the six seasons, are enumerated (I.8.39–44).²²⁰ The chapter on urines has some verses on the properties of the urine of a bull and ox (I.9.13–14). The chapter on *kāñjika* (I.11) gives details on this fluid according to the kind of grain used for its preparation (*yava*, *godhūma*, *yugandhara*).²²¹ The chapter on grain lists eighteen varieties of rice, the names of which differ considerably from those met with in the *Carakasamhitā*, *Suśrutasaṃhitā* and *Aṣṭāṅgahṛdayasaṃhitā* (I.15.1–2); the group called *kṣudradhānya* consists of *kaṇḍū*, *kapikacchurā*,²²² *kodrava*, *markaṭī*,²²³ and *śyāmāka* (I.15.14).²²⁴ Four categories of vegetables are distinguished: *patra* (leaves), *puṣpa* (flowers), *phala* (fruits), and *kanda* (roots, rhizomes, bulbs) (I.16.1). Three kinds of honey are distinguished: *bhrāmara*, *sāragha* and *kṣaudra*, produced by bees making their nests in trees, shrubs and in the cavities of trees respectively (I.18). Alcoholic drinks are divided into four types: *gauḍī*, produced from *guḍa* (treacle), *mādhvī*, produced from honey, *paiṣṭī*, produced from grain, and *niryāsā*, produced from the juice of plants; twelve varieties are distinguished: three varieties of *gauḍī*: *sīdhu*, *gauḍī* and *matsyaṇḍī*, three varieties of *mādhvī*: *mādhvīka*, *madhuka* and *mādhva*, three varieties of *paiṣṭī*: *paiṣṭī*, *ariṣṭa* and *jāta*, three types of *niryāsā*, produced from the juice of grapes and the plants called *tāḍa* and *māḍa* (I.9.1–4). Animals are divided into the following categories: *śūlin* (tusked animals),²²⁵ *śṛṅgin* (animals with horns), *nakhin* (animals with claws),²²⁶ *śvāpada* (animals of prey), *pakṣin* (birds), *matsya* (fishes), and *saṛīṣpa* (creeping animals) (I.20.1); other categories are: *jalecara* (a group of aquatic animals), *jālādhāra* (another group of aquatic animals), *grāmanivāsin* (domestic animals), and *araṇyanivāsin* (wild animals) (I.20.2), and: *ānūpa*, *jāṅgala*, and *sādhāraṇa* (I.20.2).

A feature peculiar to the *Hārītasamhitā* is the attention given to the influence of the *nakṣatras* on the course of a disease. Chapter six of the *Aṣṭāsthāna* is entirely (fifty-two verses) devoted to this subject, neglected in most of the *āyurvedic* treatises.²²⁷ Chapter seven describes an elaborate sacrificial ritual (*homavidhi*), to be performed on behalf of a patient; bundles of firewood (*samidh*), derived from many different trees, are employed in it.

The first chapter of the *Cikitsasthāna* describes the pathogenesis of fever in a way that differs from what is found in other treatises (III.1.1–3).²²⁸ A series of verses (I.4–11ab) describe chains of disorders, beginning with fever, resulting the one from the

other, and ending in death.²²⁹ Eleven dreadful (mahāghora) diseases are enumerated (1.11cd–12).²³⁰ The number of days required for each doṣa and group of doṣas to reach maturation (pāka) is specified (1.14–17ab). The average duration of a fever is said to be seven days (1.18cd–19). The choice treatment of fevers, consisting of fasting and related procedures (laṅghana), is described in detail (1.21–33); six varieties are distinguished (1.34);²³¹ laṅghana procedures should be employed for six days in vāta fevers, three days in pitta fevers, seven days in kapha fevers, while saṁnipāta fevers require ten days and reach maturation on the fifteenth day (1.36–37). Blood is the foremost doṣa in fevers occurring in children; in the sixteenth year of life the three doṣas (vāta, pitta, kapha) have become involved in fevers; from the twenty-fifth year onwards fevers are of a saṁnipātika type (1.38cd–39).²³²

A kvātha is thought to possess six properties (1.41); these should be taken into consideration with regard to the time of its application (1.42–46). Seven types of kvātha are described, which have different actions related to their degree of dilution or concentration (1.47–52ab). Several rules are given with regard to the administration of a kvātha (1.59–64 and 72–74).

Chapter two begins with verses on the physician, classification of diseases, etc. (2.1–25). Diseases are divided into three broad categories: karmaja, doṣaja and saḥaja (2.23–25).²³³ The remaining part of the chapter is devoted to fevers and their treatment. The names of fever and its characteristics in various living beings are enumerated (2.26–35).²³⁴ The exterior of fever (2.36–38)²³⁵ and its mythical origin are described. Thirteen types of sudation are listed (2.142–145).²³⁶ Four varieties of viṣamajvara are distinguished: ekāhika,²³⁷ dvyāhika,²³⁸ tryāhika or tṛīyaka, and cātūrthaka (2.187–194); an irregular (viṣama) fever is a fever that affects one of the elements of the body in particular: velājvara²³⁹ affects the rasa, ekāhika the blood, tṛīyaka the muscular tissue, cātūrthaka the bone tissue, while the fever called jīrṇa affects all the elements (2.195).²⁴⁰ Patients suffering from fever are advised to pay homage to Hanuman²⁴¹ and to recite a mantra addressed to Sugrīva²⁴² (2.218–219).

Fever, seen as an anthropomorphic figure, manifests itself fourfold and causes four types of fever: raudrajvara, when appearing like a brāhmaṇa, mahāraura or mähendrajvara in its kṣatriya form, jvareśvara in its vaiśya, and kālajvara in its śūdra form; the symptoms of these fevers are described, together with their, mainly religious, treatment (2.220–234).²⁴³

Chapter three, devoted to diarrhoea, begins with the classification of remedial measures, divided into two triads: doṣasaṁśama, dhātudūṣaṇa, and health-maintaining (used in svasthavṛtti),²⁴⁴ daivapathāśraya, yuktipathāśraya, and sattvāvajaya (3.2–3).²⁴⁵ Five varieties of diarrhoea (atisāra) are distinguished: caused by vāta, pitta, kapha, blood, and saṁnipāta.²⁴⁶ Chapter three also deals with jvarātisāra (3.7–8, 11–15, 20–22).²⁴⁷ The same chapter describes the four types of grahaṇī and their treatment (3.79–108).²⁴⁸ A complication of grahaṇī is a disorder called the third type of gulma,²⁴⁹ six varieties of it are distinguished: plīhana, yakṛt, jaṭhara, kaṇḍū, malabandha or aṣṭhīlā, and krimi (3.84–85).²⁵⁰

Chapter four describes five varieties of gulma, distinct according to their localization:²⁵¹ yakṛt in the cardiac region, aṣṭhīlā in the lateral parts of the abdomen, plīhana

in the middle of the abdomen, caṇḍavivṛddhaka in the region of the urinary bladder, and granthin in the umbilical region (4.2–4ab).²⁵² Gulma is said to be caused either by pitta and blood or by all three doṣas (4.8–9).²⁵³ The same chapter is concerned with the treatment of viśūcikā (4.27–38).

Chapter five describes parasites (krimi) and disorders caused by them.²⁵⁴ Seven kinds of external and six kinds of internal parasites are distinguished; the latter are collectively called kiñcaka. The external worms are called kṛṣṇā yūkā (black louse), śvetā yūkā (white louse),²⁵⁵ carmayūkikā,²⁵⁶ bindukī,²⁵⁷ matkuṇā,²⁵⁸ śironivāsinī (the head louse), and yaṣṭikā.²⁵⁹ The internal worms are called prthumuṇḍa,²⁶⁰ kiñcukasaṁnibha,²⁶¹ dhānyānikuranibha,²⁶² sūkṣma, aṇu, and sūcīmukha.²⁶³

Chapter six discusses the digestive fire (agni) and its three disorders. A slow fire (mandāgni) is attributed to an excess of vāta and kapha or of kapha singly (6.3cd and 7), an intensely active fire (tūkṣṇāgni) to a deficiency of vāta and kapha (6.10).²⁶⁴ The latter disorder gives rise to an even more intensely burning fire, called bhasmaka,²⁶⁵ and a long series of diseases in its wake (6.11cd–13).²⁶⁶ A few verses at the end of the chapter (6.32–36) are about the treatment of anorexia (arocaka), not discussed as a separate disease in the *Hārītasamhitā*.

Chapter seven is about colicky pains (śūla).²⁶⁷ Ten types are described: three caused by one doṣa, three by a combination of two doṣas, one type accompanied by āma, one type devoid of āma, one arising from undigested food (ajīrṇāṇna), and one arising during the digestive process (pariṇāmaja).²⁶⁸ Two types are added to this series: one arising after the intake of food (bhuktopari),²⁶⁹ regarded as a variety of the kapha type, and one, arising after the digestion of the food, called pariṇāmaja again (7.13–16). A saṁnipātika type is referred to in the verses on treatment (4.56–57).²⁷⁰

Chapter eight is concerned with pāṇḍuroga. Five types are distinguished: three caused by one doṣa, one by all three doṣas, and one called rūkṣaṇa (8.1–2); the rūkṣaṇa type is probably identical with the type arising from the eating of earth (8.11–14).²⁷¹

Chapter nine deals with kṣaya (91–102) and rājayakṣman (9.103–133). Kṣaya (a deficiency of one or more of the bodily constituents) is said to be ultimately caused by evil actions committed in previous existences (9.1–4), although the immediate causes of each type of kṣaya are separately listed. Ten types are distinguished: a deficient state of one of the three doṣas and of one of the seven bodily elements (9.5–7).²⁷² Specific prescriptions are given for each of these, to which are added a series of compound formulae.²⁷³ The second part of the chapter describes the mythical origin of rājayakṣman, its immediate causes, symptoms, and treatment. A particular number of symptoms is not mentioned,²⁷⁴ nor the involvement of the doṣas. Specific types of kṣaya (= kṣaya), comparable to those of the *Suśrutasamhitā*,²⁷⁵ are not described, but the causes of these disorders are referred to as giving rise to rājayakṣman (10.103–111).

Chapter ten, about raktapitta, agrees remarkably well with the *Carakasamhitā* (Ci.4) in the description of the aetiology and symptomatology. Eighteen complications of this disease are listed (10.16–18).²⁷⁶ Specific treatments are given for nosebleeds (10.35–41), bleeding from the mouth (10.42–50), raktātisāra (10.77–79), and bleeding from the female genitals (yonipravāha; 10.80–82).

Chapter eleven deals with arśas (haemorrhoids) and distinguishes five types,

caused by each of the three doṣas, all three doṣas, and blood, to which a sixth, congenital (sahaja) type is added.²⁷⁷ Polypous growths, or warts, subsumed under arśas, are mentioned as occurring in the nasal cavities, ears, oral cavity, and corners of the eyes (11.19).²⁷⁸

Chapter twelve is concerned with cough (kāsa; 12.1–45) and vomiting (chardi; 12.46–76). Eight types of kāsa are described: three types caused by one doṣa, one type each by vāta and pitta, kapha and pitta, samnipāta, blood, and kṣaya; a traumatic (kṣataja) type is added to this series (12.5–8).²⁷⁹ Vomiting is characterized as either snigdha or rūkṣa (12.56);²⁸⁰ five types are mentioned, caused by vāta, pitta, kapha, samnipāta, and parasites (krimi).²⁸¹

Chapter thirteen is about tṛṣṇā (thirst) and tāluṣoṣa (desiccation of the palate). Eight types of thirst are mentioned: brought about by vāta, pitta, kapha, of traumatic origin (kṣataja), caused by kṣaya, ajīrṇa (indigestion), dry foods (rūkṣasevana), and fever (13.1–3); types added to this series are caused by samnipāta (13.7), atisāra, and śūla (13.11).²⁸² The therapy of tāluṣoṣa is described (13.26–36), while its aetiology and symptoms are omitted.²⁸³

Chapter fourteen treats mūrchā (fainting) and some related disorders. The pathogenesis of this disease is described as an occlusion of the apertures (dvāra) of the five sets of twelve vessels (nāḍikā) of the five sense organs, resulting in a sudden loss of consciousness (samjñānāśa). Six types of the disorder, also called moha, are distinguished, caused by vāta, pitta, kapha, blood, trauma (abhighāta), and alcoholic drinks (madya) or poison (14.1–6).²⁸⁴ Two more varieties, brought about by samnipāta and kṣaya, are referred to (14.13 and 15–16). Related disorders mentioned in this chapter are bhrama (giddiness), caused by pitta and vāta, tandrā, caused by vāta and kapha, and nidrā (sleepiness), caused by kapha, vāta and tamas (14–17).²⁸⁵

Chapter fifteen deals with nidrānāśa (insomnia).²⁸⁶

Chapter sixteen discusses disorders resulting from the abuse of alcohol (madātyaya; 16.1–12) and some related illnesses. Alcoholic drinks are considered to be beneficial in certain cases, whereas their abuse is scorned. Four varieties of madātyaya are acknowledged, associated with vāta, pitta, kapha, and samnipāta.²⁸⁷ Disorders related to madātyaya and called mūrchā, moha or mada, caused by toxic plant products, are dealt with at the end of the chapter.²⁸⁸ Plants yielding these toxic substances are halinī,²⁸⁹ karavīra,²⁹⁰ madayantikā,²⁹¹ mohinī,²⁹² pūga,²⁹³ and unspecified bulbous plants (16.13–18). Worthy of attention is the absence of opium.

Chapter seventeen is about dāha (a burning sensation).²⁹⁴ A separate chapter on this disorder, absent from the *Carakasamhitā*, *Suśrutasamhitā* and Vāgbhaṭa's works, forms part of the *Mādhavanidāna* (19), where it also follows upon the chapter on madātyaya. The types of dāha, described in the *Suśrutasamhitā*, are absent from the *Hārītasamhitā*.²⁹⁵

Chapter eighteen describes apasmāra (epilepsy) and its treatment. The verses on its pathogenesis (samprāpti), not very clear, ascribe it to the actions of a series of excited doṣas, namely vāta, pitta, kapha, udāna, and prāṇa (18.1–5). Types are not distinguished.²⁹⁶

Chapter nineteen is about unmāda (insanity). The types mentioned are those caused

by one doṣa, a combination of two doṣas, the three doṣas, and poison (19.1–2);²⁹⁷ descriptions of these types are absent. Intense emotions are recognized as factors contributing to the appearance of mental disorders (19.3–6).²⁹⁸ Possession is not referred to at all in this short chapter, exclusively devoted to insanity brought about by natural causes.²⁹⁹ The therapy of unmāda is said to be the same as that of apasmāra; the chapter on bhūtaavidyā (III.55) is referred to for specific treatments (19.7).

Chapter twenty is devoted to vāta diseases. The total number of these diseases is said to be eighty-four, in contrast with the usual number of eighty (20.1).³⁰⁰ The five kinds of vāta are mentioned, followed by lists of the disorders they give rise to. Sixteen disorders affecting the head, caused by excitement of prāṇa, accompanied by pitta, are enumerated: śiraḥśūla, karṇaśūla, śaṅkhaśūla, asṛggada, ardhāśīrṣavikāra, dinavṛddhisamudbhava (roga), nāsikopadrava, manyāstambha, hanugraha, jihvāstambha, tāluśūla, tamaka, bhrama, tandrā, śvāsa, and galaroga (20.4–6ab).³⁰¹ Udāna, accompanied by kapha, gives rise to the following sixteen disorders: hikkā, śvāsa, pariśvāsa,³⁰² kāsa, śoṣārti, ghaṇṭikā,³⁰³ hṛlāsa, hṛccūla, yakṛt, vātavami,³⁰⁴ kṣavathu, jṛmbhaṇa, vaisvaryā,³⁰⁵ pīnasa, aruci, and pratiśyāya (20.7–9).³⁰⁶ Vyāna causes disorders affecting the whole body (sarvāṅgika), the symptoms of which vary according to the bodily element chiefly affected (20.10–14); the disorders caused by samāna are summarily described (20.15–17); these two groups are listed later on (20.31–34).

The chapter proceeds with the description of ākṣepaka, caused by vyāna,³⁰⁷ and apatantraka;³⁰⁸ the latter disease, called apratānaka by others,³⁰⁹ presents a number of varieties, called daṇḍāpratānaka,³¹⁰ snāyupratānaka,³¹¹ pratānaka,³¹² abhigātasamudbhava,³¹³ and asthisandhisamśuskaka³¹⁴ (20.18–26ab). The verses that follow are about four diseases: ekāṅgika,³¹⁵ pakṣaghāta,³¹⁶ tūnī, and pratitūnī³¹⁷ (20.26cd–30). The description of the disorders caused by the five kinds of vāta is resumed with a reference to twice sixteen of them brought about by vyāna, some of which are mentioned: hṛtstambha, prṣṭhastambha, ūrustambha, and grdhrasī (20.31–32). The sixteen disorders caused by samāna are: śūla, gulma, udāvarta, ādhmāna, udāvarta again, parīṇāma, viśamāgni, ajīrṇa, vātagulmaka, parikledī, rasaśeṣa, rasa, malavālaka, bandhī, bhedī, and vilāsī (20.33–34).³¹⁸ The sixteen disorders caused by apāna are: bhagandara, bastiśūla, meha, arśas, atikoṭhaka, the two līṅgadoṣas, gudabhramśa, gudaśūlaka, mūtrarodha, and vidrodha (20.35–36).³¹⁹ Some disorders arising from a combination of doṣas are added: vāta and pitta together bring about dāha, samtāpa, śoṣa, and mūrchā; vāta and kapha together produce śaitya, śopha, aruci, and jāḍya (20.37–38ab).

The last vāta disease described is ardita (facial paresis); three types are distinguished, brought about by vāta, vāta and pitta, vāta and kapha.³²⁰

Many vāta diseases which are described by Caraka, Suśruta and Vāgbhaṭa are not characterized in this chapter of the *Hārītasamhitā*.³²¹

Chapter twenty-one, devoted to ānavāta, is noteworthy, since the early samhitās do not deal with this disease. The *Mādhavanidāna* describes its aetiology and symptomatology in a separate chapter,³²² the *Mādhavacikitsā*³²³ and later treatises describe its treatment. The *Hārītasamhitā* distinguishes four types of ānavāta: viṣṭambhin, gulmakṛt or gulmāma, snehin ānavāta, and pakvāma, to which a fifth type,

sarvāṅgāma, is added (21.5–21).³²⁴

Chapter twenty-two is about gr̥dhrasī (sciatica), a disease usually described among the vāta diseases.³²⁵ The *Hārītasamhitā* may be the only treatise devoting a separate chapter to it. The varieties described and their doṣic involvement are remarkable too. The variety called koṣṭhaśīrṣikā, brought about by vāta and blood, presents a painful swelling of the knees;³²⁶ the second variety is gr̥dhrasī sensu stricto; the third variety, called pādaharṣa,³²⁷ is either connected with kapha and vāta or with pitta and vāta (22.1–6ab).

Chapter twenty-three describes vātarakta and its treatment. Special types and doṣic varieties are not distinguished.³²⁸

Chapter twenty-four, on amlapitta, is of importance in acknowledging this disease as a distinct entity. Caraka, Suśruta and Vāgbhaṭa do not regard amlapitta as a separate disorder, but it is described as such in the *Kāśyapasaṃhitā* and *Mādhavanidāna*,³²⁹ while the *Mādhavacikitsā* has a chapter on its treatment. *Hārītasamhitā* and *Mādhavanidāna* distinguish an upwards and a downwards moving type; the doṣic varieties of the *Mādhavanidāna* are not mentioned in the *Hārītasamhitā*.

Chapter twenty-five, on śopha (swelling, especially of inflammatory origin), does not present a clear classification. Types caused by one of more doṣas and by blood are mentioned, as well as types caused by kṣaya, kṣata (trauma), and other disorders; varieties affecting the upper, middle and lower part of the body, or the whole body, are referred to (25.1–10).³³⁰

Chapter twenty-six is the second chapter of the *Cikitsasthāna* on gulma, a disease also discussed in chapter four. Five doṣic varieties are described, caused by vāta, pitta and kapha singly, pitta and kapha together, and saṃnipāta (26.1–8).³³¹ A type caused by blood and occurring exclusively in women, described by Caraka, Suśruta and Vāgbhaṭa, is referred to in a prescription (26.71–72) that does not make clear whether it was thought to be a gynaecological disorder. A type due to blood is moreover mentioned, together with a gulma of traumatic origin (kṣataja), in some stanzas on wholesome foods and drinks (pathya) in cases of gulma. Verses on the treatment of śopha are included in this chapter (26.62–70).

Chapter twenty-seven describes jalodara (ascites). Varieties are not mentioned, nor the involvement of the doṣas in this disease. The group of disorders called udara, to which jalodara belongs in āyurvedic literature,³³² is absent from the *Hārītasamhitā*. The surgical treatment of jalodara by means of a tube (jalanāḍī), through which the fluid accumulated in the abdominal cavity can be removed, is known to the *Hārītasamhitā* and considered to be a dangerous procedure (27.4–9).³³³

Chapter twenty-eight, on prameha (urinary disorders), agrees with the other major treatises in mentioning twenty types of this disease (28.1).³³⁴ In contrast with the early saṃhitās, the *Hārītasamhitā* does not specify which types are associated with each of the three doṣas; it refers to involvement of pitta and kapha, but omits vāta in the aetiology of prameha. Not all the twenty types of prameha are characterized or mentioned in prescriptions. Types discussed in the chapter are ghṛta- or sarpir-, jala-, khaṭikā-, lavaṇa-, madhu-, pūya-, rakta- or rudhira-, rasa-, śarkarā-, śukra-, takra-, and vaśameha. Names peculiar to the *Hārītasamhitā* are khaṭikāmeha,³³⁵ pūyameha,³³⁶ rasameha, and

takrameha.³³⁷ Unusual too is the term mūtraprameha (28.45).³³⁸ The chapter also describes the treatment of the pramehapiṭikās (28.26–35ab), without dealing with their names and characteristics;³³⁹ disorders mentioned in these verses are somapāka (28.33) and mehapāka (28.35ab).³⁴⁰

Chapter twenty-nine describes the treatment of mūtrakṛcchra without giving attention to its aetiology and symptoms. Chapter thirty contains verses on the therapy of mūtra(ni)rodha (retention of urine), the nidāna of mūtrakṛcchra, and the treatment of mūtrakṛcchra and mūtra(ni)rodha.³⁴¹

Chapter thirty-one describes āsmaṛī (vesical calculi) and its treatment. Some varieties are described without clearly delineating their origins and symptoms. Abnormal behaviour during sexual intercourse appears to be an important aetiological factor. Vāta and blood are involved too.³⁴² Śarkarā (urinary gravel) is referred to as a curable disorder of childhood.³⁴³ Surgical treatment is said to be described in the ghṛtādhyāya of the *Sūtrasthāna*.³⁴⁴

Chapter thirty-two is about vṛṣṇavṛddhi or aṇḍavṛddhi (swelling of the scrotum). Four doṣic types are mentioned, caused by vāta, pitta, kapha, and saṃnipāta.³⁴⁵

Chapter thirty-three on visarpa (erysipelas) distinguishes eight types, originating from one doṣa, two doṣas, blood, and saṃnipāta.³⁴⁶ The types connected with two doṣas, called ājñeya, granthika and kardama, are caused by vāta and pitta, pitta and kapha, vāta and kapha respectively.³⁴⁷

Chapter thirty-four is remarkable in describing a group of four diseases, collectively called upasarga, which means that they are regarded as infectious.³⁴⁸ Vāta and blood are thought to be involved in the causation of these disorders. The group consists of kṣudraka, antaka, ghora, and masūrikā. Kṣudraka, caused by pitta and blood, occurs in the season of spring and is characterized by pustules which resemble burns (agnidagdhatvat). Masūrikā is a disease with pustules which are round (vartula), like masūrikā (lentils); the pustules become festering and disappear within a short time (34.1–6). The verses on the treatment of these diseases begin with the advice to employ secret protective rituals (guptākāra rakṣāyogavidhāna) and to avoid contact with people belonging to the lower classes (34.7). Prescriptions against kṣudraka and ghora follow (34.8–17). The chapter proceeds with the description of an infectious fever (upasarga-jvara) with haematuria (raktamūtra) and diarrhoea (34.18–21). The chapter ends with counsels suitable in all cases of upasarga, now called kṣudrikā, and with rituals to be performed after recovery (34.22–26).

Chapter thirty-five, on ulcers (vraṇa), describes types associated with one doṣa, two doṣas, and saṃnipāta.³⁴⁹ Nāḍīvraṇas (fistules) are referred to (35.1–9).³⁵⁰ The verses on treatment prescribe ointments and lotions; surgical treatment is a neglected topic (35.10–27).

Chapter thirty-six describes ślīpada (elephantiasis) and its four types, connected with vāta, pitta, kapha, and saṃnipāta.³⁵¹ A type affecting the fatty tissue (medas) in particular is called vālmūka (36.1–4ab).³⁵² The treatment of ślīpada is the same as that of vraṇa. The presence of a separate chapter on ślīpada in the *Hārītasamhitā* is a remarkable feature, in line with the *Mādhavanidāna*, which also deals with it separately.

Chapter thirty-seven may be unique in āyurvedic literature in being entirely de-

voted to arbuda, a local swelling of relatively large size.³⁵³ Four varieties are described, arising from vāta, pitta, kapha, and saṁnipāta.³⁵⁴

Chapter thirty-eight describes two diseases, gaṇḍamālā and lūtā(vraṇa).³⁵⁵ Four varieties of gaṇḍamālā are distinguished, brought about by vāta, pitta, kapha, and saṁnipāta (38.1–3). This is a unique feature, since gaṇḍamālā is not divided into a number of varieties in any other medical treatise.³⁵⁶ The disorder called lūtā is described as a deep ulcer (vraṇa) with a purulent discharge (pūyavisrāva) (38.14–16), while some small animal, the lūtā, is supposed to live inside (38.17–20).³⁵⁷ Seven kinds of lūtā are distinguished and characterized with regard to their form, colour and location: rohiṇī, viśadā, vijayā, (vi)bhedinī, kāntārī, vajrapuṣpā, and indrāyudhā (38.4–16). The treatment of lūtā(vraṇa) aims at curing the ulcer and killing the animal inside (38.17–23). The therapy of gaṇḍamālā is referred to in passing, together with an otherwise unknown disease called prakāṇṭaka (38.18).

Chapter thirty-nine is devoted to kuṣṭha. As usual in āyurvedic treatises, eighteen types are referred to (39.3), but these are not divided into two large groups.³⁵⁸ The list with the types of kuṣṭha comprises only fourteen items: kapālaka,³⁵⁹ udumbara, dadrumaṇḍala(ka), visarpaka, hastibala,³⁶⁰ kiṇa, gojihvaka, (lohita)maṇḍala, vaipā-dika,³⁶¹ carmadala, visphoṭaka, bahuvraṇa, kaṇḍū, and vicarī³⁶² (39.5–6). Two more types are referred to in the verses on treatment: citrakuṣṭha (39.59) or citraka (39.54), and pāmā (39.47 and 49); the two remaining types are not mentioned in the chapter. Hārīta's visarpaka, hastibala or gajacarman, kiṇa, gojihvaka and kaṇḍū do not occur in the lists found in other works; the nature of visarpaka remains unclear, but gajacarman is the equivalent of what is commonly called carmakūṣṭha,³⁶³ kiṇa of kiṭima,³⁶⁴ gojihvaka of ṛṣyājihvaka,³⁶⁵ bahuvraṇa of śatāruṣka,³⁶⁶ kaṇḍū of alasaka.³⁶⁷ Kuṣṭha types mentioned in many āyurvedic texts and absent from the *Hārītasamhitā* are ekakuṣṭha, kākaṇaka, puṇḍarīka, rakasā, sidhma, sthūlāruṣka, and śvitra.³⁶⁸

Twelve among the fourteen types listed in the *Hārītasamhitā* are characterized (39.7–12); the characteristics of kiṇa and carmadala are omitted. Signs brought about by the doṣas are enumerated, as well as the symptoms when one of the seven bodily elements is chiefly affected (39.13–18). The remaining part of the chapter is concerned with treatment.

Chapter forty is the first of a series of chapters belonging to the division of āyurveda called śālākya and describes diseases of the head (śīrora). Types distinguished are those caused by vāta, pitta, kapha, blood (rakta), vāta and rakta, saṁnipāta, and parasites (krimi);³⁶⁹ pitta is thought to be the chief causative agent. Additional diseases of the head are ardhāśīrṣa³⁷⁰ and dinavṛddhikara³⁷¹ (40.1–3). Absent are anantavāta³⁷² and śaṅkhaka.³⁷³ Upaśīrṣaka³⁷⁴ is mentioned in the verses on treatment.

Chapter forty-one describes a disease that is peculiar to the *Hārītasamhitā*. This disease, called bhrūdoṣa, is caused by excessive reading and looking at minute or distant objects. Vāta, pitta and blood are involved in it. The disorder is characterized by pains in the region of the eyebrows (bhrū) and eye complaints (41.1–3).

Chapter forty-two is about diseases of the nose (nāsāroga), caused by one of the doṣas, blood, and parasites (krimi).³⁷⁵

Chapter forty-three constitutes the only example known in āyurvedic literature of

a chapter entirely devoted to indralupta (baldness), also called khallāṭaka.³⁷⁶ Five varieties are mentioned, caused by vāta, pitta, kapha, blood, and saṁnipāta.³⁷⁷

Chapter forty-four is concerned with diseases of the ears (karṇaroga). Types distinguished are those caused by one of the three doṣas, a combination of two doṣas, all three doṣas, parasites (krimi), ulcers (vraṇa), a trauma (abhighāta), a wound (kṣata), and lūtidoṣa. A type occurring in childhood is mentioned as well (44.1–6). Karṇaśūla is referred to in the verses on treatment (44.11).³⁷⁸

Chapter forty-five deals with eye diseases (netraroga), distinguished into types arising from vāta, pitta, kapha, blood, two doṣas, and all three doṣas (45.1–5).³⁷⁹ Four types of inflammation (puṣpa) are described, caused by vāta, pitta, kapha, and saṁnipāta (45.14–18). Specific eye diseases mentioned in passing are timira, kaṇḍū, paṭala, arbuda, rātryandhya (45.20), kāca, and nīlikā (45.21),³⁸⁰ as well as disorders caused by wounds (kṣata), a trauma (abhighāta), grief, and burns (45.21). Five varieties of cataract (paṭala) are characterized, associated with vāta, pitta, kapha, blood, and saṁnipāta.³⁸¹

Chapter forty-six, the last one on śālākya, describes the diseases of the oral cavity (mukharoga). Diseases of the lips (oṣṭharoga) are attributed to vāta, pitta and blood (46.1–4),³⁸² diseases of the teeth to vāta, pitta, kapha, blood and parasites (46.5–8),³⁸³ diseases of the tongue to vāta, pitta, kapha, blood, and saṁnipāta (46.17–25),³⁸⁴ a disease of the uvula or larynx (ghaṇṭikā) to kapha (46.26), a disease of the root of the tongue and pharynx (kaṇṭhasandhi) to kapha and blood (46.27–28ab); bleeding from a granthi in the throat is also referred to (46.28cd–30ab).³⁸⁵ The chapter ends with a description of galaśuṇḍikā and its treatment (46.33–39).³⁸⁶

Chapter forty-seven is about vājīkaraṇa (aphrodisiacs). Several types of klaihya (impotence) are described without an adequate characterization. Types mentioned are those caused by suppression of the sexual urge (nirodha), excessive intercourse (ativyavāya), old age (vayas), mental disorders (the mānasa type), deficiency of the semen (retākṣaya), and a constitutional abnormality (sahaja).³⁸⁷

Chapter forty-eight, the first of a series on gynaecology and obstetrics,³⁸⁸ deals with infertility (vandhyāṭva) in women. Six types are distinguished: one type caused by intercourse before puberty, four types called kākavandhyā, anapatyā, garbhasrāvī, and mṛtavatsā, and one type caused by weakness (balakṣaya, dhātukṣaya) (48.1–8).³⁸⁹ Characteristics of these types are not given.³⁹⁰ Doṣic types of infertility are also described (48.13–25).³⁹¹

Chapter forty-nine describes dietary rules during the ten months of pregnancy (garbhopacāra)³⁹² and the handling of the longings of pregnant women (dohada).³⁹³

Chapter fifty is about the treatment of abortion, immature and premature birth (calitagarbha), which may occur during the first to eighth months of pregnancy. Chapter fifty-one describes the treatment of eight disorders occurring during pregnancy: hrllāsa (nausea), chardi (vomiting), śoṣa (emaciation), jvara, śoṭha, aruci, vivarṇatva (an abnormal colour of the skin), and atisāra (51.1).³⁹⁴ Additional disorders mentioned are vibandha, vidradhi, mūtrarodha (51.10–11), and garbhacāla (abortion) (51.12).

Chapter fifty-two is concerned with mūḍhagarbha (malposition of the foetus) (51.5–8)³⁹⁵ and mṛtagarbha (death of the foetus) (51.9–10).³⁹⁶ Varieties of mūḍhagarbha associated with one, two and three doṣas are described (52.1–8), as well as disorders

caused by blood and pitta (52.15). Mūḍhagarba is treated with drugs and by means of surgical procedures (52.11–17).³⁹⁷ The chapter contains some prescriptions assuring a safe delivery (52.18–21),³⁹⁸ and two mantras having the same end in view (52.22–23 and 26–28); a yantra is also described (52.24–25).³⁹⁹ One of the mantras refers to a Rākṣasī, called Surasā, living in the Himālayas, the sound of whose ankle bells (nūpura) guarantees an uncomplicated parturition.

Chapter fifty-three describes the regimen of a woman in childbed (sūtikopacāra);⁴⁰⁰ some rituals to be performed on behalf of the child are also mentioned: jātakā (= jātakarman),⁴⁰¹ nāmakarman,⁴⁰² karmavedhana,⁴⁰³ vastrabandha,⁴⁰⁴ and vivāha (the marriage ceremonies) (53.6–7).⁴⁰⁵

Chapter fifty-four deals with children's diseases (bālāroga). The child's health may be affected by five disorders of the breastmilk (kṣīradoṣa): ghana-, uṣṇa-, amla-, alpa-, and kṣārakṣīra (54.1–7).⁴⁰⁶ One of these, ghanakṣīra, may give rise to the disease called utphullikā or utphullakukṣitā (54.3 and 9–13).⁴⁰⁷ The chapter proceeds with verses on a long series of ailments that may occur in children and their treatment (54.14–30). The last part of the chapter describes disorders caused by the attacks of female demons (Pūtānā) and the appropriate rituals to appease them (54.31–54).⁴⁰⁸ The verses on this subject, which may be quoted from a *Kaumāratāntra*, mention two series of eight of these malignant beings, who seize a child on the first to eighth day of its life. Their names are Lohitā, Revatī, Dhvāṅkṣī or Vāyasī, Kumārī, Śākunī, Śivā, Ūrdhvakeśī, and Senā, or Rohiṇī, Vijayā, Kālī, Kṛttikā, Dākinī,⁴⁰⁹ Niśā, Bhūtakesī, and Kṛṣṇāṅgī.⁴¹⁰ The second series of names is absent from the verses on treatment.

Chapter fifty-five is concerned with bhūtaavidyā (demonology)⁴¹¹ and describes malignant beings (graha) able to cause possession syndromes (āveśa). Ten of these beings,⁴¹² called grahanāyaka, are mentioned, together with the symptoms, both physical and mental, they bring about (55.2–18): Aindra, Āgneya, Yama, Nairṛta, Vāruṇa, Māruta, Kubera or Yakṣarāj, Aiśānya, Grahaka, and Paisācika. The treatment of the disorders caused by these grahas is of a mixed character and consists of drugs, rituals, and mantras (55.19–28).

Poisons and the treatment of poisoning (viṣatantra) constitute the subject of chapter fifty-six. Eight kinds of poison of vegetable origin are described: śṛṅgika, vatsanābha, śārṅgavera or śārṅgavairika, dāraka, kālākūṭa, śaṅkha, satsukanduka, and hālāhala, which can be distinguished by their colour (56.1–5ab).⁴¹³ The treatment of poisoning consists of the administration of drugs, accompanied by mantras (56.5cd–17). Eight types of poisonous animals are listed, together with the symptoms caused by their bites: darvīkara, maṇḍalin, rājīmant, guṇḍasa, vṛścika, goraka, khaṇḍabinduka, and a group consisting of alarka, mūṣa and mārjāra (56.18–24). The treatment is of a composite character again (56.25–31).⁴¹⁴

Chapter fifty-seven deals with surgical subjects and describes wounds and fractures, together with their treatment (57.1–13). Eight types of trauma are distinguished: chinna, bhinna, bhagna, ghrṣṭa, piṣṭa, āspḥālita, samprahāra, and samghāta.⁴¹⁵ The removal of foreign bodies (śalyoddhāra) is the next subject (57.14–28). Two sets of twelve surgical instruments are enumerated. The twelve blunt instruments (yantra) are: prabandha (bandages), godhāmukha,⁴¹⁶ vajramukha,⁴¹⁷ samḍaṁśa,⁴¹⁸ cakrā-

kṛti,⁴¹⁹ kaṅkapāda,⁴²⁰ ānaka,⁴²¹ śṛṅgika,⁴²² kuṇḍala,⁴²³ śrīvatsa,⁴²⁴ sauvatsika,⁴²⁵ and pañcavaktra,⁴²⁶ the twelve sharp instruments (śastra) are: ardhaçandra,⁴²⁷ vrīhimukha,⁴²⁸ kaṅkapattra,⁴²⁹ kuthārikā,⁴³⁰ karavīrakapattra,⁴³¹ śalākākārapattraka,⁴³² baḍiṣa,⁴³³ grḍhrapāda,⁴³⁴ śūlin,⁴³⁵ and ghanamudgara⁴³⁶ (57.16–20).⁴³⁷ The remaining part of the chapter (57.29–46) is about the treatment of fractures (bhagna) and wounds.

Chapter fifty-eight describes burns caused by cauterization (agnidagdha) and their treatment. Four types are distinguished: īṣaddagdha, madhyadagdha, atidagdha, and samyagdagdha (58.1–5ab).⁴³⁸ The chapter ends with a verse on the treatment of a complication (upaghāta) resulting from the injudicious employment of smoking (dhūmapāna) for medicinal purposes.

Chapter one of the Sūtrasthāna is on weights and measures (tulāmāna). Two systems are described; the first system resembles the kālīṅga, the second the māgadhamāna.⁴³⁹ The average quantities to be prescribed of a series of medicinal substances are mentioned.

Chapter two is about the different types of medicated oils and their indications (tailapākavidhi). Four types of preparation are distinguished: khara-, cikkaṇa-, madhya-, and viśoṣipāka.⁴⁴⁰

Chapter three is about the application of medicated clysters (nirūhastikarman).⁴⁴¹

Chapter four, about sudation (svedana) and its indications, mentions seven types: loṣṭa-, bāṣpa-,⁴⁴² agnijvālā-, ghaṭi-,⁴⁴³ jala-,⁴⁴⁴ phala-, and vālukāsveda.⁴⁴⁵ This list differs from a previous one with thirteen items (III.2.142–145).

Chapter five describes four methods of bloodletting (raktāvasecana): venesection (śīrāvirecana), drawing of blood by means of gourds (alābu), horns (śṛṅga), and leeches (jalaukā) (5.1–4).⁴⁴⁶ The chapter ends with a verse on the characteristics of corrupted blood (5.5).

Chapter six describes the drawing of blood by means of leeches. Four kinds of leeches are distinguished: indrāyudhā, rohiṇī, kālīkā, and dhūmrā.⁴⁴⁷ The dhūmrā leech is the only one that can safely be applied by physicians.

Chapter one of the Kalpasthāna describes the mythical origin, tastes, and other properties of haritakī. Seven varieties are distinguished: vijayā, rohiṇī, pūtānā, amṛtā, cetakī, abhayā, and jīvanti. The appearance, colour, location, and uses of each variety are enumerated.⁴⁴⁸ The subject is resumed in chapter three.

Chapter two is about the uses of triphalā.⁴⁴⁹

Chapter three (haritakīkalpavarṇanabheda) continues the discussion of the varieties of haritakī and their uses. Two varieties of cetakī, a black and a white one, are distinguished.⁴⁵⁰

Chapter four (rasonakalpa) is concerned with the mythical origin, properties and uses of garlic (rasona, laṣuna).⁴⁵¹ Garlic owes its origin to some drops of the amṛta, fallen from the beak of Garuḍa, who stole a portion of it during the churning of the ocean. It is described as a rejuvenating substance, forbidden to brāhmaṇas.

Chapter five describes guggulu and its uses.⁴⁵² This substance is said to derive from trees growing in desert regions (marubhūmi) and in the Himālayas. It should be collected in deserts in summer and in the mountains in winter.

The only chapter of the Śārīrasthāna treats subjects usually discussed in a Śārīrasthāna, but its main emphasis is on embryology. The human body is said to be composed of the five mahābhūtas, five sense organs, seven elements (dhātu), ten kinds of vāta⁴⁵³ (1), and three guṇas (2); the three guṇas are jīva, manas and ākāśa.⁴⁵⁴ The four stages of the human life cycle are called bāla, prauḍha, pragalbha, and sthāvira (3).⁴⁵⁵ Verses on female physiology introduce the section on embryology. A series of factors are enumerated which result in the experience of sexual pleasure during intercourse: dhātubala gives rise to sattva, sattva to rajas, rajas to kāma (the sexual urge), kāma to surata (orgasm) (7). Menstruation (ṛtu) takes place during the first seven days of each cycle;⁴⁵⁶ after this period a woman is called ṛtumatī (8–9). Conception is the result of the union of the male semen (bīja) and female rajas; both fluids are a form of śukra or retas (16). The male and female roles in conception are compared to those of Śiva and his Śakti (14–15).⁴⁵⁷

The embryological development is sketched in some detail (17–23). The stages described differ considerably from those found in other works.⁴⁵⁸ The birth of a boy or a girl is ascribed to a preponderance of either the male semen or the female rajas (26–27). The child born will be of a sāttvika, rājasa or tāmasa character, depending on the emotional state of the mother during impregnation (28–30). A series of constitutional characteristics is enumerated which are partly the same as those of the constitutions described in a previous chapter (I.5); the series of constitutions (prakṛti) of the Śārīrasthāna is remarkable, even unique, in including those brought about by the dominance of a combination of vāta and rakta, pitta and rakta, and kapha and rakta (31–36).⁴⁵⁹ Some subsequent verses (37–40) are about the conditions leading to the birth of a non-male-non-female (napuṃsaka) and the birth of twins (yamala). The remaining part of the chapter gives a second sketch of the development of the embryo, different from the preceding one, and a detailed account of the origin of the physical and mental components of the human organism, in which the various kinds of vāta, the mahābhūtas and the three guṇas (sattva, rajas, tamas) have a predominant role. The account disagrees in many respects with what is found in the other saṃhitās.⁴⁶⁰

The pariśiṣṭādhyaḥ, not present in all the MSS⁴⁶¹ and by some regarded as a later addition to the Hārītasamhitā,⁴⁶² refers to the Śārīrasthāna as embodying the teachings of Vyāsa. After listening to it, Hārīta went to the river Ganges (Svarṇadī) in order to bathe and meditate.

Those studying the śāstra, i.e. āyurveda, are said to enjoy health and to be delivered from all sins. The āyurveda, as venerable as a Veda, has originally been expounded by Brahmā, subsequently by Atri, as well as by Dhanvantari and the Aśvins. Other experts acquainted with it were Caraka, Suśruta and Vāgbhaṭa. The saṃhitā of Atri was authoritative in the Kṛtuguga, Suśruta's work in the Dvāpara, and Vāgbhaṭa's treatise in the Kaliyuga. Medical saṃhitās were also composed by Viṣṇu, the Aśvins, Garga, Mādhyaṇika,⁴⁶³ and Mārkaṇḍeya. The six (medical) sages are Agniveśa, Bheda, Jatukarṇa, Parāśara, Hārīta, and Kṣīrapāṇi. The foremost authority, however, is Ātreya, whose position is equal to Ananta (i.e., Śeṣa) among the serpents and Śambhu among the gods.

Names of medicinal plants mentioned in the Hārītasamhitā that are absent from the

Bṛhatrayī are: ālūśaka (I.16.16),⁴⁶⁴ arikā (III.2.61; 28.12),⁴⁶⁵ aṣṭahālī (III.2.96),⁴⁶⁶ balādānī (I.16.14),⁴⁶⁷ bhīru (III.47.16 and 52.19),⁴⁶⁸ bhīruka (III.18.14),⁴⁶⁹ bhīrukā (III.48.28),⁴⁷⁰ bila (III.51.8),⁴⁷¹ cāpamardaka (I.16.16),⁴⁷² cāriṇī (III.28.19),⁴⁷³ cavilā (III.12.43), dāraka (III.56.2 and 3), dhara (III.4.25),⁴⁷⁴ gajābalā (III.2.126), gavādānī (III.18.24),⁴⁷⁵ gavāstānī (III.12.32),⁴⁷⁶ guruvṛkṣaka (II.7.2),⁴⁷⁷ hastikanda (I.16.34 and 39),⁴⁷⁸ indrā (III.28.15),⁴⁷⁹ kaithaka (III.18.26),⁴⁸⁰ kañcaṭa (III.20.86), kaṇḍū (I.15.14),⁴⁸¹ kaṇṭaka (III.33.11),⁴⁸² kaphādānī (I.16.13),⁴⁸³ karaha (I.17.5 and 8),⁴⁸⁴ kaṭāhaka (I.17.12),⁴⁸⁵ kokilāhvaya (III.7.56),⁴⁸⁶ kokilākhya (III.40.17),⁴⁸⁷ koṭaja (III.2.116),⁴⁸⁸ kuberākṣa (III.7.58),⁴⁸⁹ kumbhā (III.2.61),⁴⁹⁰ kumedhikā (III.18.9),⁴⁹¹ kuṇḍalī (III.2.54; 3.92),⁴⁹² mācikā (III.6.35),⁴⁹³ māḍa (I.19.4),⁴⁹⁴ mahācāvala (I.5.55),⁴⁹⁵ mahatpicumanda (III.11.53),⁴⁹⁶ mahāvibhīṭaka (III.45.28), mallī (III.11.95),⁴⁹⁷ methikā (I.16.8),⁴⁹⁸ mohinī (III.16.17),⁴⁹⁹ murāmāṃsī (III.9.98; 21.29),⁵⁰⁰ nāgavallī (I.17.29),⁵⁰¹ nṛttaka (III.31.9),⁵⁰² palāśabheda (III.54.17),⁵⁰³ payadantī (III.11.31),⁵⁰⁴ rudrajatā (III.10.66),⁵⁰⁵ śakrāhva (III.2.66; 28.20),⁵⁰⁶ śaṇaghaṇṭikā (III.18.35),⁵⁰⁷ śārṅgavairika (III.56.1),⁵⁰⁸ śārṅgavera (III.56.3),⁵⁰⁹ satsukanduka (III.56.2 and 4),⁵¹⁰ siṃhamukhī (III.15.5),⁵¹¹ śitāśivā (III.43.5),⁵¹² sitāvarṣā (II.7.3),⁵¹³ śṛṭaka (III.18.14),⁵¹⁴ suparpā (III.5.30), suparnikā (III.15.6),⁵¹⁵ sūryakāntī (III.52.18),⁵¹⁶ śvetādrīkarṇī (III.48.21), tāmbūlaparpā (I.16.33),⁵¹⁷ tantuka (III.2.103),⁵¹⁸ tulasī (III.2.136; 4.35; 12.36), tulasikā (III.12.33), tuṇḍī (I.16.17),⁵¹⁹ tuṇḍīra (I.16.23),⁵²⁰ tuṇḍīraka (III.6.35; 11.108), vālmikā (I.17.2),⁵²¹ vanakesara (III.9.97),⁵²² vāstukarṇī (III.52.14),⁵²³ vasudhā (III.10.52),⁵²⁴ vāsumantī (III.18.25),⁵²⁵ vejikā (I.16.8),⁵²⁶ vikacā (III.6.19),⁵²⁷ vṛddhadantī (III.18.25),⁵²⁸ and yugandhara (I.11.6; 23.3).⁵²⁹

Mercury may be mentioned once (III.55.21: pārada).

Date

The *Hārītasamhitā* that is known to us from MSS and some editions is sometimes regarded as entirely different from a much earlier treatise of the same name. The later text is for that reason referred to as Pseudo-*Hārītasamhitā* and its author is called Hārīta II to distinguish him from Hārīta I or Vṛddhabārīta.⁵³⁰ The main reason for this distinction was the small number of quotations from Hārīta (and Ātreya) that can be traced in the printed versions of the *Hārītasamhitā*. The number of traceable citations is, to be sure, restricted, but proves to be larger than was formerly assumed. Consequently, the relationship between an old version and the one preserved is more complicated than presumed by those who consider Hārīta I and II to be altogether distinct.

The date of the old version of the *Hārītasamhitā* cannot be determined with any precision. Clues to the period to which the printed text belongs are, on the other hand, not scarce at all.

The *Hārītasamhitā* contains one verse that is found in Ravigupta's *Siddhasāra*, a work that dates from about A.D. 650.⁵³¹ Ravigupta's verses are of his own making and not borrowed from predecessors, which establishes that the *Siddhasāra* is earlier than the *Hārītasamhitā*. This fact is in conformity with the appearance of Vāgbhaṭa's name in the pariśiṣṭādhyaḥ, although this chapter may be a later addition. Some more features that may be interpreted as pointing to influences from the side of Vāgbhaṭa

consist of the description of mada in the chapter on madātyaya and the description of the disease called upaśīṣaka, recognized by Vāgbhaṭa, but absent from the *Caraka-* and *Suśrutasamhitā*. The presence of separate chapters on śūla (III.7), nidrā (III.15), āmavāta (III.21), amlapitta (III.24) and vṛddhi (III.32), in line with the arrangement found in the *Mādhavanidāna*, is in favour of placing the *Hārītasamhitā* in about the same period, i.e., the eighth century. The question whether or not the *Hārītasamhitā* is posterior to Mādhava's work remains problematic, since both works may partially be based on the same sources.⁵³² In addition, there are considerable differences between the arrangement and the nosological system of *Hārītasamhitā* and *Mādhavanidāna*. The absence of verses on the examination of the urine and the pulse indicates that the *Hārītasamhitā* is anterior to Vaṅgasena's *Cikitsāsārasaṃgraha* and the *Śārṅgadharasamhitā*. The absence of prescriptions containing Cannabis corroborates this point.⁵³³

Plant names that may rather safely be taken as evidence pointing to a relatively late date of the *Hārītasamhitā* are kañcaṭa,⁵³⁴ māḍa,⁵³⁵ murāmāṃsī,⁵³⁶ rudrajaṭā,⁵³⁷ tulasī,⁵³⁸ and yugandhara.⁵³⁹

Some more late words found in the *Hārītasamhitā* are bhājikā (III.2.238), mahācāvala (I.5.55), and pasāhī (I.15.1).⁵⁴⁰ The references to Śiva and his Śakti (Śārīra 14–15) and to meditation on Śiva (śivadyāna; III.55.15) confirm that the work cannot be assigned to an early period.

The evidence taken together is in favour of placing the *Hārītasamhitā* in the period A.D. 700–1000.⁵⁴¹

Chapter 5 Mādhava

Mādhava¹ was the author of the *Rogavinīścaya* and, possibly, of the *Mādhavacikitsā*. His authorship of some other medical works is problematic.²

Contents of the *Rogavinīścaya* or *Mādhavanidāna*

The work called *Rogavinīścaya*³ by the author himself (1.2),⁴ but generally known as the *Mādhavanidāna*, is the earliest compendium on the group of five subjects collectively called nidāna, which consist of nidāna in its restricted sense (aetiology), pūrvarūpa (prodromes), rūpa (symptomatology), upaśaya (therapeutic diagnosis), and samprāpti (pathogenesis). The first chapter of the treatise is devoted to the characterization of these five concepts and a number of related issues, while the remaining sixty-eight chapters contain descriptions of the nidāna, pūrvarūpa, rūpa and samprāpti, and also in many cases the upadhravas (complications) and signs indicating incurability (asādhya-lakṣaṇa), of all the diseases recognized by Mādhava. The work ends with an enumeration of the diseases dealt with⁵ and two concluding verses.

The *Mādhavanidāna*, which contains about 1,530 verses, is primarily a work that draws upon earlier treatises,⁶ chiefly the *Carakasamhitā*, *Suśrutasamhitā*, and *Aṣṭāṅgahṛdayasamhitā*. Sources of minor importance are the *Aṣṭāṅgasamgraha*⁷ and Ravigupta's *Siddhasāra*.⁸ As not all the verses can be traced to these five works, Mādhava must have utilized some still unidentified or lost earlier texts, while, moreover, he may have composed parts of his treatise himself. The fact that Mādhava made use of unidentified treatises is attested by some verses which derive from texts vaguely referred to as 'another book' by the commentators on the *Caraka-* and *Suśrutasamhitā*.⁹ Moreover, the first verse of the chapter on bhagna (44.1), which looks like a quotation, consists of the answer by an unnamed authority, who may be Ātreya, to a question put by Hutāśa (= Agniveśa); 44.2–7 may be from the same unknown source, which is not the *Carakasamhitā*.¹⁰

In spite of its compilatory character, the *Mādhavanidāna* is an important treatise. Verses on nidāna – scattered over several sections of the works of Caraka, Suśruta and Vāgbhaṭa – have not only been collected in it, but also selected and arranged so as to form coherent descriptions of diseases. In some cases Mādhava failed in organizing his matter carefully, thus making the seams of his patchwork stand out clearly.¹¹

The majority of the chapters of the *Rogaviniścaya* are made up of verses from more than one source, but exceptions are not infrequent.¹² The stanzas chosen by Mādhava not only show variants, but are sometimes loosely related to the corresponding accepted readings of Caraka, Suśruta and Vāgbhaṭa, or they even consist of alternative readings recorded as such by the commentators.¹³ Descriptions of disorders occurring in the saṃhitās in prose appear in a versified form in Mādhava's work.¹⁴ Sometimes verses based on prose passages from the *Suśrutasamhitā* are preferred to stanzas on the same subject found in Vāgbhaṭa's works.¹⁵

A few chapters may have been written, partly or completely, by Mādhava himself,¹⁶ unless they have been taken from an unknown text. Odd verses from an unknown source or by Mādhava are far from rare.¹⁷

A major contribution of Mādhava is the new order in which the diseases were arranged by him. A similar attempt had already been made by Ravigupta, but it was Mādhava's scheme that became standard and was adopted by a large number of later authors.

The *Rogaviniścaya* is concerned with six out of the eight divisions (aṅga) of āyurveda; rasāyana and vājīkaraṇa, being subjects connected with treatment, are left out of consideration. The six divisions represented are kāyacikitsā (chapters 2–19, 22–37, 49–54), bhūtaavidyā (chapters 20–21), śalya (chapters 38–48 and 55), śālākya (chapters 56–60), kaumārābhṛtya (chapters 61–68), and agadatantra (chapter 69). The reasons for this particular manner of arranging the material remain obscure.

The creation of this new alignment was facilitated by dividing the book into a rather large number of chapters as compared with the corresponding parts of the saṃhitās of Caraka, Suśruta and Vāgbhaṭa, which often describe groups of diseases, sometimes rather distantly related, in one single chapter. Examples illustrating Mādhava's procedure are the separate chapters on dāha (a syndrome characterized by a burning sensation; 19),¹⁸ nāḍīvrāṇa (fistulas; 45),¹⁹ upadaṃśa (affections of the male member; 47),²⁰ visarpa (erysipelas; 52),²¹ asṛgdara (menorrhagia and metrorrhagia, as well as fluor; 61),²² and stanaroga (diseases of the mammary glands; 66).²³ The reverse procedure is also adopted; the *Mādhavanidāna* contains a small number of new clusters: nidrā (excessive sleepiness) and tandrā (lassitude) occur in the same chapter (17) as mūrchā (fainting) and saṃnyāsa (prolonged loss of consciousness);²⁴ ānāha (obstructive abdominal swelling) is described along with udāvarta (a group of disorders arising from restraint of the natural urges; 27).²⁵

Mādhava's inventiveness in arranging the disorders also appears from the changed order of the members of groups of disorders, in comparison with their order in the sources. Examples are found in the chapters on galagaṇḍa (goitre), etc. (38),²⁶ and netraroga (eye diseases; 59). The composition of these groups does not always tally with that found in the works of Caraka, Suśruta and Vāgbhaṭa, since the author of the *Rogaviniścaya* made his own decisions. An example is the group of disorders known as upadaṃśa, which has been enlarged by adding liṅgavartī, also called liṅgārśas (warts on the penis; 47.6–7).²⁷ In the chapter on kṣudrarogas (55)²⁸ he adopts the order of the *Suśrutasamhitā*, but diminishes the number of these diseases from forty-eight²⁹ to forty-three by leaving out visphoṭaka, pāmā, vicarcī, rakasā,³⁰ masūrika,³¹ and carma-

kīla,³² and adding a new item, śūkaradaṃṣṭṛaka.³³ The chapter on mukharoga (diseases of mouth and throat; 56), mainly based on Suśruta, adds the disease karāla (56.20), described by Vāgbhaṭa.³⁴ The chapter on bālaroga (children's diseases; 68) contains descriptions of pārigarbhika (68.10–11)³⁵ and mahāpadma (68.14–15ab),³⁶ borrowed from the *Aṣṭāṅgasamgraha*.

Special features of the *Rogaviniścaya* or *Mādhavanidāna*³⁷

A notable and substantial contribution of Mādhava consists of his description of new diseases absent from earlier works, and the development of some disorders which are only sketchily characterized or not recognized as fully independent diseases by his predecessors into autonomous nosological entities. These innovations became highly influential and were almost universally acknowledged by later writers.

Two disorders recognized as independent entities for the first time by Mādhava are śūla (piercing, colic-like pain; 26)³⁸ and visphoṭa (diseases in which vesicles or blisters appear; 53). The *Suśrutasamhitā* deals with śūla in its chapter on the treatment of gulma (visceral swelling), where it is in the first place regarded as a secondary affection in cases of gulma (U.42.66cd–69ab), and secondly as an autonomous disease (U.42.73cd–88a). Mādhava's chapter on śūla, made up of twenty-two verses which may have been composed by himself, precedes that on gulma (28),³⁹ and does not contain a single statement on a relationship between the two. The disease called visphoṭa is not absent from the classical saṃhitās, but is only cursorily referred to there as forming part of a group of disorders. The *Carakasamhitā* mentions it in the chapter on śvayathu (inflammatory swellings; Ci.12.90cd), together with kakṣāḥ (herpes zoster) and other skin eruptions, while Suśruta (Ni.13.18) and Vāgbhaṭa (A.h.U.31.9ab = A.s.U.36.9) regard it as one of the kṣudrarogas.⁴⁰ Mādhava gives the disorder an independent status, and devotes a separate chapter to it, consisting of eleven verses, which, with one exception, may be of his own making.

The new diseases appearing for the first time in the *Mādhavanidāna* are: āmavāta (25), pariṇāmasūla and annadravaśūla (26.15cd–22), medoroga (34), śītapitta (50), amlapitta (51), masūrikā (54), śūkaradaṃṣṭṛaka (55.55), kuñcana (59.96), pakṣmaśāta (59.99), and yonikanda (63).

The disease called āmavāta⁴¹ (often equated with rheumatoid arthritis)⁴² is described in a separate chapter of twelve verses which may have been composed by Mādhava. The *Hārītasamhitā* (III.21) described it in its own manner, independently of Mādhava. The disorders called pariṇāmasūla (a type of śūla manifesting itself during the digestion of food) and annadravaśūla (which may appear during the digestive process or precede or follow it), which are unknown in earlier medical treatises,⁴³ are dealt with in the chapter on śūla as varieties of this disease. Medoroga (obesity)⁴⁴ is characterized in four verses, which may again be by Mādhava; these verses are followed by five ślokas from the *Carakasamhitā* (Sū.21.5–9). Mādhava made medoroga into a nosological entity, whereas it was Caraka's aim not to characterize a disease in its own right, but an undesirable condition leading to afflictions of various kinds. An illness called śītapitta (urticaria),⁴⁵ not recorded in the classical saṃhitās, is

described by Mādhava in a short chapter of six verses, the first five of which may be his own, whereas the sixth has been borrowed from Vāgbhaṭa (A.h.U.31.32–33ab = A.s.U.36.30).⁴⁶ Three disorders closely related to śtipitta according to Mādhava's arrangement, namely udarda (a special form of urticaria), koṭha (an exanthematous, itching eruption), and utkoṭha (a disorder resembling koṭha), are discussed in the same chapter, thus forming a new cluster of Mādhava's making.⁴⁷ The term amlapitta usually denotes a symptom in the classical saṃhitās, not a separately described nosological entity.⁴⁸ Mādhava regards it as an independent disease (corresponding to a dyspepsia, accompanied by vomiting and diarrhoea or spitting of blood), characterized in a separate chapter of twelve verses, which may be his own. The chapter on amlapitta of the *Hārītasamhitā* (III.24) has possibly been influenced by the *Mādhavanidāna*, whereas that of the *Kāśyapasamhitā* (Khila 16) appears to be original. The chapter on amlapitta of the *Rogavinīścaya* ends with a verse on a related disorder, śleṣmapitta, but, since the commentators are silent on it, it can safely be assumed to be a later interpolation.⁴⁹

Very important is the fact that Mādhava is the earliest author to give a detailed description of masūrīkā (smallpox, chicken pox, and other infectious, eruptive fevers). A disorder of this name is briefly mentioned in a single verse of the chapter on śvayathu of the *Carakasamhitā* (Ci.12.93), together with romāntikā (Ci.12.92), related to masūrīkā, whereas Suśruta (Ni.13.38) and Vāgbhaṭa (A.h.U.31.8 = A.s.U.36.8) regard masūrīkā as one of the kṣudrarogas. The *Kāśyapasamhitā* deals with masūrīkā in a verse at the end of the chapter on visarpa (Khila 14), while the *Hārītasamhitā* (III.24) considers it to be a variety of contagious piḍakās (pustules).⁵⁰ The *Mādhavanidāna* has a chapter of thirty-one verses, probably by Mādhava, on masūrīkā and its various types, among which romānti figures.⁵¹

The disorder called sūkaradaṃṣṭra⁵² was added by Mādhava to the group of kṣudrarogas. The *Mādhavanidāna* describes seventy-eight eye diseases, as opposed to the seventy-six of the *Suśrutasaṃhitā*, by adding two diseases of the eyelashes, called kuṭcana⁵³ and pakṣmaśāta.⁵⁴ Śrīkaṇṭhadatta claims in his comments that kuṭcana was borrowed from some other treatise, while pakṣmaśāta⁵⁵ is equated by this commentator with kṛcchronmīla of Vāgbhaṭa (A.h.U.8.3–4 = A.s.U.11.4–5).⁵⁶ The short chapter of four verses on yonikanda may have been composed by Mādhava. This disease, especially prevalent in elder women according to Śrīkaṇṭhadatta in his comments, probably corresponds to a prolapse of the vagina or uterus.⁵⁷

The group of puerperal disorders (65; sūtīkāroga) is an innovation of Mādhava; it consists of āṅgamarda, jvara, kampa, pipāsā, gurugātrātā, śoṭha, śūla, and atisāra.⁵⁸

One of the diseases not described in the *Mādhavanidāna* is a disease of the head, called upaśīrṣaka,⁵⁹ tuṇḍi, a children's disease, is also absent,⁶⁰ as well as the term bradhma.⁶¹

Several editions of the *Mādhavanidāna* contain additional verses, ignored in the *Madhukośa*. Some stanzas added to the end of the chapter on grahaṇī describe the varieties called saṃgrahagrahaṇī⁶² and ghaṭīyantragrahaṇī.⁶³

Quotations from and references to the *Rogavinīścaya* or *Mādhavanidāna*

Mādhava, the author of the *Mādhavanidāna*, is quoted by Āḍhamalla,⁶⁴ Āsubodha and Nityabodha Senagupta in their commentary on the *Rasaratnasamuccaya*, Gaṇanāthasena in the auto-commentary on his *Siddhāntanidāna*,⁶⁵ Gopāladāsa in the *Cikitsāmṛta*,⁶⁶ Jayaratna in the *Jvaraparājaya*, Jivānandavidyāsāgara in his commentary on the *Rasendrasārasaṃgraha*, Nāganātha in the *Nidānapradīpa*, Nārāyaṇa in the *Jvaranirṇaya*,⁶⁷ Niścalakara in the *Ratnaprabhā*,⁶⁸ Sukhānanda in his commentary on Lolimbarāja's *Vaidyajīvana*,⁶⁹ and in the *Yogaratanākara*.⁷⁰

Mādhava is mentioned in the *Haṃsarājānidāna*, Herambasena's *Gūḍhabodhaka-saṃgraha*, Trimalla's *Vaidyacandrodaya*,⁷¹ Vācaspati's commentary on the *Mādhavanidāna*,⁷² and Vijayarakṣita's part of the *Madhukośa*.⁷³

The author of the *Mādhavanidāna* is called Mādhavācārya by Āḍhamalla⁷⁴ and in the commentary on the *Āyurvedābhisāra*.⁷⁵ He is quoted or referred to as Mādhavakara or -kāra in Aghoranātha's commentary on his *Bhīṣaksarvasva*,⁷⁶ Āsubodha and Nityabodha Senagupta in their commentary on the *Rasaratnasamuccaya*, Hemādri's commentary on the *Aṣṭāṅgahṛdayasaṃhitā*,⁷⁷ Niścalakara's *Ratnaprabhā*,⁷⁸ Śivamiśra's *Vaidyāśāstraśivānubhava*, Śrīkaṇṭhadatta's part of the *Madhukośa*,⁷⁹ Sukhānanda's commentary on the *Vaidyajīvana*,⁸⁰ Vācaspati's commentary on the *Mādhavanidāna*,⁸¹ and Vijayarakṣita's part of the *Madhukośa*.⁸² Āsubodha and Nityabodha Senagupta quote him as the *Rugvinīścaya* in their commentary on the *Rasaratnasamuccaya*. He is called Saṃgrahakāra in Śrīkaṇṭhadatta's part of the *Madhukośa*⁸³ and Vācaspati's *Ātanikadarpana*.⁸⁴

The *Mādhavanidāna* is quoted or referred to as *Gadavinīścaya*, *Mādhavanidāna*, *Mādhavasamgraha*, *Nidāna*, *Nidānasamgraha*, *Rogavinīścaya* and *Rugvinīścaya* in Āḍhamalla's commentary on the *Śārīṅgadharaśamhitā*,⁸⁵ Aghoranātha's commentary on his *Bhīṣaksarvasva*,⁸⁶ the *Ārogyāmṛtabindu*, Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*,⁸⁷ the *Basavarājīya*,⁸⁸ *Bhāvaprakāśa*,⁸⁹ *Bhesajjamañjūsānaya*, *Bṛhannighaṇṭuratanākara*, Caturbhūja's commentary on the *Rasaḥṛdaya*,⁹⁰ Guṇrājśarmamiśra's *Viśikhānupraveśavijñāna*,⁹¹ Harṣakīrti's *Yogacintāmaṇi*,⁹² Hemādri's commentary on the *Aṣṭāṅgahṛdayasaṃhitā*,⁹³ Jñānasārāma's version of the *Amṛtasāgara*,⁹⁴ Kāśīrāma's commentary on the *Śārīṅgadharaśamhitā*,⁹⁵ Lakṣmicandra's *Lakṣmīprakāśa*,⁹⁶ Lakṣmīrāma's commentary on the *Siddhabheṣajamañimālā*,⁹⁷ Meghamuni's *Meghavinoda*,⁹⁸ Niścalakara's *Ratnaprabhā*,⁹⁹ Rāmacandra's *Rāmaṇinoda*, Rājesvaradatta Miśra's *Svasthavṛttasamuccaya*,¹⁰⁰ Satyadeva Vasiṣṭha's commentary on Rāvaṇa's *Nāḍīparīkṣā*, Śrīkaṇṭhadatta's commentary on the *Siddhayoga*,¹⁰¹ Trimalla's *Yogatarāṅgiṇī*,¹⁰² and *Bṛhadhyogatarāṅgiṇī*,¹⁰³ Vācaspati's commentary on the *Mādhavanidāna*,¹⁰⁴ Vallabhagaṇi's commentary on Hemacandra's *Abhidhānacintāmaṇi*,¹⁰⁵ the *Vīrasīṅhāvaloka*,¹⁰⁶ Vṛnda's *Siddhayoga*,¹⁰⁷ and Yogīndranātha's commentary on the *Carakasamhitā*.¹⁰⁸

The *nidāna* verses of a very large number of later works draw heavily on the *Mādhavanidāna* without specifying this source.

Verses said to be from the *Mādhavanidāna*, but dealing with treatment, are found in the *Basavarājīya* and Vallabhendra's *Vaidyacināmaṇi*.

Works related to the *Rogavinīścaya* or *Mādhavanidāna*

A supplement, called *Nidānapariśiṣṭa*, was written by Hārādhanā,¹⁰⁹ while a *Mādhavanidānapariśiṣṭa*¹¹⁰ is due to Brahmasaṃkara Śāstrī.¹¹¹ An *Abhinavamādhavanidāna* by Rājaguru Kavindra and a *Mādhavanidānasāra* are known from Sri Lanka.¹¹²

Commentaries on the *Rogavinīścaya* or *Mādhavanidāna*

The large number of commentaries on the *Rogavinīścaya* testifies to the fame this work acquired.

The following commentaries are known or mentioned:

- 1 *Vyākhyāmadhukośa* by Vijayarakṣita and Śrīkaṇṭhadatta.
- 2 *Ātāṅkadarpaṇa* by Vācaspati.
- 3 *Rogavinīścayavivarāṇasiddhāntacintāmaṇi*¹¹³ or simply *Siddhāntacintāmaṇi*¹¹⁴ by Narasiṃha Kavirāja,¹¹⁵ assistant of Rāmakṛṣṇa Bhaṭṭa and son of Nīlakaṇṭha Bhaṭṭa.¹¹⁶ Narasiṃha was the teacher of Vaidyacintāmaṇi, who lived in the eighteenth century.¹¹⁷ Narasiṃha refers in the *Siddhāntacintāmaṇi* to his commentary on the *Carakasamhitā*, called *Carakatattvaparakāśakaustubhaṭīkā*, and frequently adduces Caraka in illustration of Mādhava's verses, whilst quotations from Suśruta are much rarer.¹¹⁸ Narasiṃha's *Siddhāntacintāmaṇi* is undoubtedly the same as the *Siddhāntacandrikā* by Narasiṃha Kavirāja, son of Nīlakaṇṭha Bhaṭṭa and pupil of Rāmakṛṣṇa Bhaṭṭa, mentioned by S. Dasgupta,¹¹⁹ who claims that the work, though based on the *Madhukośa*, is an excellent commentary, containing much that is both instructive and new. Dasgupta was in error when supposing that probably the only MS available was the one belonging to the library of his family; an edition, planned by him, never appeared. Th. Aufrecht recorded a MS of an anonymous *Siddhāntacandrikā* on the *Mādhavanidāna*.¹²⁰ P.V. Sharma discovered an additional MS of Narasiṃha's commentary in the Central Library of the Benares Hindu University. This MS, the first two parts of which are missing, was written in 1770 by one Jayacandradāsa, who belonged to the tradition of Narasiṃha.¹²¹ P.V. Sharma¹²² informs us that Narasiṃha criticizes the authors of the *Madhukośa* at many places and quotes the following authorities and works: Bhaṭṭāraka (Hāriscandra), Bhoja, Cakra, Caraka, Gayin, Hārīta, Jejjāṭa, Kṣārapāṇi, Mahābhārata, Nimi, Sātyaki, Śrīdharasvāmin, Suśruta, Vāgbhaṭa, Vāpyacandra, Varāhamihira, Videha, Viṣṇudharmottara, Vṛddhakāśyapa, and Yaśodhara. The data available point to the eighteenth or the last part of the seventeenth century as the age of Narasiṃha.
- 4 *Mādhavanidānatippaṇī* by Bhāvamīśra.¹²³ An anonymous work of the same title is also known.¹²⁴
- 5 *Rugvinirṇayaṭīkā* by Bhavānī Sahāya.¹²⁵
- 6 *Nidānārthaprakāśikā* by Candrakumāra Dāsa.¹²⁶
- 7 *Saralā* by Chiranjivi Lall Sharma.¹²⁷
- 8 *Arthaprakāśikā* by Gaṇeśa Bhiṣaj.¹²⁸

- 9 a commentary by Īśānadeva.¹²⁹
 - 10 *Mādhavanidānasubodhinī* by Jñānameru, pupil of Mahimasundaragaṇi of the Kharataragaccha, in his turn pupil of Sādhukīrtiyupādhyāya.¹³⁰
 - 11 a commentary by Kālidāsa.¹³¹
 - 12 a commentary on chapter two (on fevers) by Karmacandra, a Jain monk of the Kharataragaccha, who lived in the second half of the seventeenth or first half of the eighteenth century.¹³²
 - 13 a commentary by Maitreyarakṣita.¹³³
 - 14 a commentary by Raiśarman,¹³⁴ who may have been the elder brother of Vācaspati, the author of the *Ātāṅkadarpaṇa* on the *Mādhavanidāna*.¹³⁵
 - 15 *Vaidyamanoramā* by Rāmakṛṣṇa, son of Gaurī and Nīlakaṇṭha.¹³⁶
 - 16 a commentary by Rāmanātha Vaidya.¹³⁷
 - 17 *Śāradā* by Śrīśāradācārāṇasena, a relatively modern commentary.¹³⁸
 - 18 a commentary by Sudhīra.¹³⁹
 - 19 a commentary by Sukīra.¹⁴⁰
 - 20 *Sudhālaharī* by Umeśānanda Śarman, a modern commentary.¹⁴¹
 - 21 *Subodhinī* by Vādeva (Vāsudeva?) Māthura, consisting of short glosses on difficult verses of the *Nidāna*.¹⁴²
 - 22 an anonymous commentary called *Bālabodhinī*.¹⁴³
 - 23 an anonymous avacūri.¹⁴⁴
 - 24 an anonymous stabaka.¹⁴⁵
- Gaṅgārāma, a Jain monk, rendered the *Mādhavanidāna* into Hindī verse in 1821/22; this version, called *Yatinidāna*, contains additional material on diseases not described by Mādhava.¹⁴⁶

Mādhavacikitsā

The *Mādhavacikitsā*¹⁴⁷ is the earliest compendium on therapy of Sanskrit medical literature, if one disregards a work like the *Yogaśataka*, which consists only of a collection of recipes.¹⁴⁸

The text of the edition is divided into eighty-one chapters. Chapters one to sixty-seven are connected with the treatment of the disorders described in the *Mādhavanidāna*, essentially in the same order. The remaining chapters are devoted to rasāyana (68), vājīkaraṇa (69), pañcakarman (70), sneha (71), sveda (71), sveda (72), vamaṇa (73), vireka (74), anūvasana and nirūha (75–76), dhūma (77), nasya (78), kavala and gaṇḍūṣa (79), prescriptions for various disorders (*prakīrṇarogacikitsā*), as well as weights and measures (80), and paribhāṣā (81). The same type of arrangement was adopted in many later works, such as Vṛnda's *Siddhayoga*¹⁴⁹ and Cakrapāṇidatta's *Cikitsāsāṃgraha*.¹⁵⁰

The scheme of chapters one to sixty-seven does not fully agree with that of the *Mādhavanidāna*. The *Mādhavacikitsā* has separate chapters on pravāhikā (irritation of the large intestine, including the bacillary dysenteries; 3),¹⁵¹ bhūtonmāda (insanity caused by supernatural beings; 19),¹⁵² gr̥dhraśī (sciatica; 22),¹⁵³ plīhan (splenomegaly; 36),¹⁵⁴ śophodara (37),¹⁵⁵ snāyuka (dracontiasis, i.e., the Guinea worm disease; 53),¹⁵⁶ and somaroga or mūtrātisāra (a polyuria occurring in women;

63).¹⁵⁷ One chapter is concerned with the therapy of visarpa and visphoṭa (52), whereas the *Mādhavanidāna* devotes two chapters to these diseases.¹⁵⁸ One chapter deals with all kinds of vṛṇa (ulcers and wounds; 43).¹⁵⁹ The chapters on kaumārabhṛtya are arranged differently from those in the *Nidāna*; their order is strīroga (61), pradara (62), somaroga (63), strīroga again (64), and garbharaṁsā (65),¹⁶⁰ whereas the *Nidāna* has asṛgdara (= pradara), yonivyāpad (a composite group, comprising menstrual disorders, diseases of the vagina, and functional disorders of psychogenic origin), yonikanda, mūdhagarbha (disturbances of pregnancy and malposition of the foetus), sūtikāroga (puerperal diseases), stanaroga (diseases of the breasts), and stanayaduṣṭi (disorders of the breastmilk).¹⁶¹

A striking feature of the *Mādhavacikitsā* is the presence of chapters on the treatment of snāyuka and somaroga, diseases unknown to the author of the *Mādhavanidāna*.¹⁶² The disease called snāyuka is described for the first time in Vṛṇḍa's *Siddhayoga* (55.15–19), somaroga in Vaṅgasena's *Cikitsāsārasaṁgraha* (strīroga 80–88), two treatises written after the period in which Mādhava lived. The view that the *Mādhavanidāna* and *Mādhavacikitsā* were written by one and the same author¹⁶³ can therefore be upheld only if the chapters on snāyuka and somaroga are considered to be interpolations of later origin.¹⁶⁴ The possibility that these chapters are actually interpolations is strengthened by the absence of a chapter on snāyuka in the manuscript kept at the Bhandarkar Oriental Institute in Poona.¹⁶⁵

The general impression one gains on reading the *Mādhavacikitsā* is that of a rather early work, prior to the *Siddhayoga*. It shares many verses with it, but is more concise. Part of its prescriptions do not occur in the *Siddhayoga*¹⁶⁶ or *Cakradatta*.

Details pointing to an early date of composition – prior to that of the *Siddhayoga* – are the following. The chapter on kṛmīroga (diseases caused by parasites; 7) does not yet prescribe the use of pārasīyayavānī,¹⁶⁷ and the juice from the leaves of dhattūra.¹⁶⁸ Religion and astrology do not figure in the treatment of masūrikā and viṣa, while they do so in the *Siddhayoga*.¹⁶⁹ Many of the more complicated compound formulae of *Siddhayoga* and *Cakradatta* are absent from the *Mādhavacikitsā*.¹⁷⁰

A noteworthy feature is the presence, in agreement with the *Mādhavanidāna*, of a separate chapter on the treatment of śūla and pariṇāmasūla.¹⁷¹ Chapters on the treatment of āmavāta,¹⁷² amlapitta,¹⁷³ and medoroga¹⁷⁴ are present as well. The section on the treatment of various disorders contains a prescription against śītapitta (prakṛṇaroga 1).¹⁷⁵

Some other noteworthy features of the treatise consist of a prescription with kaṇṇīka¹⁷⁶ as one of its ingredients and the presence of prescriptions against carmakīla in the chapter on kṣudraroga (55.25 and 30).^{177 178}

Sources are sometimes referred to in the *Mādhavacikitsā*.¹⁷⁹ A considerable number of verses have been borrowed from Ravigupta's *Siddhasāra*.¹⁸⁰

As in the *Mādhavanidāna*, the author does not mention his name, but the colophon of the edition states that the work is by Mādhava, son of Indukara.¹⁸¹

The *Mādhavacikitsā* is quoted as *Mādhavasamgraha* in Nīścalakara's *Ratnaprabhā*¹⁸² and, without mention of the name of the work, by Śrīkaṇṭhadatta in the *Vyākhyākusumāvalī*.¹⁸³

Other medical works

The question which of the other medical treatises attributed to an author called Mādhava can be assigned to the one who wrote the *Mādhavanidāna* and, possibly, the *Mādhavacikitsā*, still remains partially unanswered, though many of the problems concerning medical works by authors of the name of Mādhava have been solved in recent years, first and foremost thanks to the scholarship of P.V. Sharma.¹⁸⁴ Some obscurities are left, for it cannot be ascertained which Mādhava wrote the works called *Praśnasahasravidhāna*, *Yogavyākhyā*, and *Mādhavasamgraha*.

The *Praśnavidhāna* is once, without the author being mentioned, referred to by Vijayarakṣita,¹⁸⁵ who calls it a śuśrutaśloka-vārttika, i.e., versified glosses on the *Suśrutasamhitā*.¹⁸⁶ A quotation, attributed to Mādhavakāra in Hemādri's commentary on the *Aṣṭāṅgahṛdaya*,¹⁸⁷ may be from the same work. Nīścalakara quotes the *Praśnasahasravidhāna*, i.e., the exposition on a thousand questions, in his *Ratnaprabhā*; unlike Vijayarakṣita, he also gives the name of its author, Mādhava or Mādhavakara.¹⁸⁸ Nīścala's first quotation consists of a question and the answer to it, both in verse, connected with a statement found in the *Suśrutasamhitā*;¹⁸⁹ the second quotation, in verse too, is about the nature of vāta diseases.¹⁹⁰ The *Suśrutavārttika* of Mādhava, once quoted in Nīścala's *Ratnaprabhā*,¹⁹¹ is obviously the same work as the *Praśnasahasravidhāna*, because it was also composed in the form of questions and answers in verse.

A kind of commentary on the *Suśrutasamhitā* by a Mādhava(kara) has once existed, as is clear from a statement found in Vijayarakṣita's part of the *Madhukośa*,¹⁹² where – in a passage that refers to a stanza from the *Suśrutasamhitā* – Mādhavakara's name occurs as one among a number of authors of explanatory works.¹⁹³ The same series is found in Narahari's *Vāgbhaṭamaṇḍana*.¹⁹⁴ Moreover, Vācaspati cites in his *Ātaṅkadarpaṇa*¹⁹⁵ an explanation by Mādhava that also occurs in the *Madhukośa*, where it is not explicitly attributed to Mādhava. The remark derives from a commentary on the *Suśrutasamhitā*, being clearly an elucidation of a technical term found in a passage from that treatise.¹⁹⁶ Finally, the *Ratnaprabhā* claims that an author called Govardhana¹⁹⁷ preferred a comment by Jejjāṭa to that on the same subject by Mādhava.¹⁹⁸

An unsolved question is whether or not this commentary on the *Suśrutasamhitā* is identical with the *Praśnasahasravidhāna*. Conclusive evidence is not available, but it seems reasonable to assume that Mādhava did not write two explanatory treatises on the same *samhitā*.

The identity of this author has not yet been determined. S. Dasgupta¹⁹⁹ pointed to the Śrīmādhava who, according to Ḍalhaṇa in the introduction to his *Nibandhasamgraha*, composed a ṭippaṇa on the *Suśrutasamhitā*. This Śrīmādhava may or may not be the same as the one who wrote the *Praśnasahasravidhāna*. P.V. Sharma²⁰⁰ suggested that the author of the *Praśnasahasravidhāna* may be identical with Mādhava, son of Indrakara, who composed the *Paryāyaratnamālā*. Evidence confirming this identity is, however, completely lacking.

The *Yogavyākhyā* is once quoted as a work by Mādhavakara in Śrīkaṇṭhadatta's commentary on the *Siddhayoga*.²⁰¹ Judging from Śrīkaṇṭha's quotation, this work appears to have been a treatise on medicinal compounds. Niścalakara also quotes Mādhava(kara)'s *Yogavyākhyā* in his *Ratnaprabhā* on the *Cakradatta*.²⁰² The references to and the three citations in prose from this work suggest that it consisted of explanations regarding the preparation of compound drugs. Niścala is the only author mentioning a shorter version of Mādhava(kara)'s *Yogavyākhyā*, called *Svalpayogavyākhyā*.²⁰³ Conclusive evidence concerning the identity of this Mādhava(kara) is not available, but he may well be the same Mādhava(kara) who wrote the *Praśnasahasraavidhāna* on the *Suśrutasamhitā*.

The information that can be extracted from the *Ratnaprabhā* points to the *Yogavyākhyā* and *Svalpayogavyākhyā* as works concerned with the explanation of prescriptions found in the *Carakasamhitā*.²⁰⁴

A number of Niścala's quotations from and references to Mādhava(kara) that do not name a particular treatise²⁰⁵ impress as being from the *Yogavyākhyā*, on account of their style and contents. The work they comment on is the *Carakasamhitā*.²⁰⁶ Mādhava(kara) is repeatedly said to follow Jejjāta's views;²⁰⁷ Govardhana is an author who often agrees with him.

A *Mādhavasamgraha* is quoted, once only, by Niścalakara.²⁰⁸

The author

The *Rogaviniścaya* and *Mādhavacikitsā* are completely silent as to their author. He is called Mādhava, Śrīmādhava, or Mādhavakara in the colophons of manuscripts of the *Nidāna* and its commentaries²⁰⁹ and in those of the *Cikitsā*.²¹⁰ His name appears as Mādhava and Mādhavakara in Vijayarakṣita's part of the *Madhukośa*. Śrīkaṇṭhadatta refers to him as Mādhavakāra in his commentary on the *Siddhayoga*. Hemādri once quotes from the *Nidāna* as the work of Mādhavakara.

The name of Mādhava's father is Indukara or Candrakara in the colophons of manuscripts of the *Nidāna* and *Cikitsā*.²¹¹

The foregoing does not suffice to decide whether the author's name was Mādhava or Mādhavakara. It has been supposed, since their names end in -kara, that Mādhavakara and his father belonged to the Kara family mentioned as one of the families of Bengal physicians in Bharatamallika's *Candraprabhā*.²¹² The only evidence on this point is the ending -kara of the names of Mādhava and his father, but, as we have seen, there is no certainty in this respect with regard to Mādhava's name.²¹³ The name of Mādhava's father need not imply a Bengal origin, for authors are known with a name ending in -kara who did not belong to Bengal.²¹⁴

In the past there has been confusion as to the identity of Mādhava,²¹⁵ a confusion created by Hoernle in an article about the commentaries on the *Suśrutasamhitā*,²¹⁶ in which he assumed on faulty grounds that Mādhava and Vṛnda might be one and the same person. The fact that Vṛnda's *Siddhayoga* is also known as *Vṛndamādhava* strengthened him in his belief that the *Mādhavanidāna* and *Siddhayoga* were the

two parts of one work by Vṛnda. Hoernle was unaware of the existence of the *Mādhavacikitsā*, although R. Mitra's description of the Bikāner MS was available at the time he wrote his article. The discovery of more MSS has made it quite clear that Hoernle's views on the subject do not reflect the actual state of affairs.

Date

Mādhava's terminus post quem can only be deduced from the sources of the *Nidāna* and *Cikitsā*. Since the greater part of the *Rogaviniścaya* consists of stanzas borrowed from the *Carakasamhitā*, *Suśrutasamhitā*, *Aṣṭāṅgahṛdayasamhitā*, *Aṣṭāṅgasamgraha*, and *Siddhasāra*, and since the *Mādhavacikitsā* contains many verses quoted from the *Siddhasāra*, their dates of composition cannot be earlier than about A.D. 650. The terminus ante quem is the date of Vṛnda, about A.D. 900, because the *Mādhavanidāna* is referred to in the *Siddhayoga*.²¹⁷

Moreover, it has been common knowledge for a long time that a number of Arabic authors mention an Indian medical treatise that may be the *Mādhavanidāna*.²¹⁸ Among the Indian medical works recorded by Ibn Abī Uṣaybi'a (who died in 1270) in the twelfth book of his 'classes of physicians', the 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā',²¹⁹ one finds a treatise with the title bdān or ydān,²²⁰ already corrected into ndān, i.e., *Nidāna*, by Dietz²²¹ and H.H. Wilson.²²² Uṣaybi'a observes that the signs of 404 diseases are described in the work without indicating their treatment.²²³ This characterization points rather to a work like the *Mādhavanidāna* than to the *Nidānasthāna* of one of the classical samhitās, because a restricted number of diseases is dealt with in the latter under that heading. The *Nidāna* is also mentioned by Arabic authors who were earlier than Ibn Abī Uṣaybi'a, namely al-Rāzī and Ibn Wādīh al-Ya'qūbī.²²⁴ The latter describes it in the same way as Uṣaybi'a. Important new evidence came to light in 1928 with the edition of 'Alī ibn Sahl al-Ṭabarī's *Firdaws al-ḥikma*, i.e., *Paradise of Wisdom*.²²⁵ In the so-called Indian books of this treatise²²⁶ several Indian medical works are mentioned: jrk, ssrd, ndān, and aṣṭāṅghrdy, i.e., *Caraka*, *Suśruta*, *Nidāna* and *Aṣṭāṅgahṛdaya*. It is highly probable that ndān is the *Mādhavanidāna*, as no other famous Indian book with a similar title could have spread to the Arab world at so early a date (about A.D. 850). This reference to the *Nidāna* is the earliest one known in Arab literature. Because of its importance it may be expedient to summarize the most salient facts about this work and its author.²²⁷

Abū'l Ḥasan 'Alī ibn Sahl al-Ṭabarī completed his *Firdaws al-ḥikma* fī'l ṭibb in Sāmarrā' in the third year of the reign of the caliph al-Mutawakkil, i.e., in 849/850. It is a work of large scope, giving a survey of the Greek, Syrian and Indian systems of medicine as known to the Muslims. Its arrangement is less methodical than that of later medical works in Arabic, but it is often quoted by al-Rāzī and others. Particularly important is the thirtieth and last section of the *Paradise of Wisdom*, which deals with Indian medicine. In thirty-six chapters, the majority of which are rather short, it succinctly describes the theory and general therapeutic principles of Indian medicine, while at the end a number of recipes are found. The translation of Sanskrit medical terms into Arabic is usually correct,²²⁸ which indicates that 'Alī ibn Sahl made use

of the translations of Sanskrit medical works executed by order of the first 'Abbāsīd caliphs, in particular Hārūn al-Raṣīd (768–809), and encouraged by the Barmakids.²²⁹

The *Nidāna* as a separate book is mentioned once in the Indian books of the Paradise of Wisdom. The term *Nidāna* appears on two other occasions, where it is not the *Mādhavanidāna* that is referred to, but the *Nidāna* section of some other treatise. Neither a direct translation of parts of the *Mādhavanidāna* is traceable nor of passages from the *Caraka*-, *Suśruta*- and *Aṣṭāṅgahrdayasaṃhitā*, for 'Alī ibn Sahl only gives summaries of Indian medical doctrines.

Accepting the evidence supplied by 'Alī ibn Sahl and later Arabic authors and taking into account the time needed for the work of an Indian writer to become so famous as to be translated into Arabic in Persia, and to be employed as one of his chief sources by an Arabic author in 849/850, it appears reasonable to suppose that Mādhava lived in the eighth century.

The Vyākhyāmadhukośa

The *Vyākhyāmadhukośa*,²³⁰ often simply called *Madhukośa*,²³¹ is an elaborate and valuable commentary which covers the whole of the *Mādhavanidāna*.²³² It is the earliest commentary on Mādhava's treatise and gives the impression that it is not only based on works of predecessors. The first half, up to chapter thirty-two, was written by Vijayarakṣita, the second half is due to his pupil Śrīkaṇṭhadatta. Both authors quote many authorities. Vijayarakṣita presents a list of those regarded as important in the introductory verses of the *Madhukośa*: Bhaṭṭāra(haricandra), Jejjāta, Gadādhara, Vāpyacandra, Śrīcakrapāṇi(datta), Bakula, Īśvarasena, Bhoja, Īśāna, Kārttika(kuṇḍa), Sukīra, Sudhīra, Maitreya, and Mādhava.

Quoted or referred to in Vijayarakṣita's part of the *Madhukośa* are: *Abhidhāna* (2.10–11),²³³ *Agniveśa* (2.66cd–74ab), *Amara* (1.1), *Āṣādhadharma* (1.14cd–15ab), *Bakulakara* (6.15; 22.1–4), *Bhāluki* (2.24, 31cd–32ab, 75), *Bhālukitantra* (2.18–23, twice), *Bhaṭṭāraharicandra* (1.4; 1.5a–c, four times; 1.10, twice; 2.1 and 61cd–65; 28.3),²³⁴ *Bheḍa* (2.37–38), *Bhoja* (3.21; 5.1; 17.14–15ab; 18.4–6), *Cakra* (2.18–23, twice; 2.30cd–31ab, 61cd–65, 66cd–74ab; 5.31–32; 8.1 and 10; 12.27–34; 20.5; 22.57cd–58ab), *Candrikākāra* (2.61cd–65; 10.20; 22.1–4, 15, 27–28ab), *Caraka* (often), *Dr̥ḍhabala* (2.18–23, three times; 8.2; 12.1–2; 16.8cd, twice; 17.15cd–16ab; 22.14–15ab, 28cd–32ab, 44–47ef; 24.1–5; 29.6; 30.1–2; 32.1–3a), *Gadādhara* (1.4 and 11–13; 2.8–9, 40, 42–47; 3.4; 3.9–10, twice; 5.31–32; 6.5–6; 10.19c–f; 11.1–2; 16.1–2; 22.38cd–39ab and 39cd–41), *Gautama* (5.33–34), *Gayadāsa* (2.18–23; 9.11 and 12–14; 11.12–13; 12.8 and 11–14; 18.7; 22.57cd–58ab, 58cd–59ab, 59cd–60ab, 68cd–70ab, 70cd–72; 28.2, 3, 14; 29.2 and 6), *Guṇākara* (5.31–32), *Haricandra* (1.5a–c and 15cd–18; 2.34–36ab and 39; 2.61cd–65, twice; 18.9; 28.3),²³⁵ *Hārīta* (1.5d–6; 2.15cd–16, 37–38, 61cd–65; 2.66cd–74ab, twice; 3.21; 8.2; 16.5; 22.57cd–58ab, twice; 26.1; 29.6), *Harivaṃśa* (2.1), *Īśāna(deva)* (2.34–36ab; 22.22–26, 28–32ab, 54–56; 23.1–3; 24.6–10), *Īśvarasena* (1.7), *Jatūkarṇa* (2.55, twice; 2.61cd–65; 12.11–14), *Jejjāta* (1.4, 5d–6, 11–13; 2.2, 3, 10–11, 18–23, 24, 26–30ab; 2.30cd–31ab, twice; 2.37–38, twice; 2.39, twice; 2.40; 2.42–47, twice; 2.59.61ab; 2.61cd–65, twice;

2.66cd–74ab, three times; 3.4, 9–10, 14–19, 20; 5.3–4; 6.5–6 and 23; 8.1; 8.8–10 (twice); 8.11, 12–15, 19cd–21ab; 9.6–7ab and 12–14; 10.2; 10.21–29ab, twice; 11.12–13; 12.8, 11–14, 18–20, 27–34; 12.35–36, three times; 16.10; 17.6, 14–15ab, 16cd–18; 18.9 and 22; 19.7–8; 20.4, 5, 6; 20.26, twice; 20.29–30, twice; 22.6–9, twice; 22.37cd–38ab, 58cd–59ab, 70cd–72; 24.1–5; 28.2, 3, 15–16; 29.2 and 6), *Karavīrācārya* (3.14–19), *Kārttika(kuṇḍa)* (1.5d–6; 2.3, 4–7, 8–9, 10–11, 15cd–16; 2.48–54, three times; 2.61cd–65, twice; 2.66cd–74ab; 3.1–3 and 9–10; 5.43; 6.15; 9.11; 10.2 and 14; 22.15, 64cd, 68cd–70ab, 70cd–72; 27.2–12), *kāśmīrāḥ* (5.27cd–30; 10.5; 14.2), *Kāśmīrapāṭha* (2.18–23), *Kharanāda* (2.34–36ab and 61cd–65), *Kṣārapāṇi* (3.11; 28.3), *Mādhava(kara)* (1.5d–6, twice; 2.66cd–74ab; 10.8–12; 11.12–13; 22.44–47ef; 22.65ab, twice), *Nāgabhartṭantra* (2.37–38), *Nāgārjuna's Ārogyamañjarī* (6.5–6), *Pālākāpya* (2.1), *Parāśara* (1.5d–6; 2.39; 3.21; 8.8–10), *Prāśnavidhāna* (1.14cd–15ab), *śālākya* (22.65ab), *Samgraha* (30.1–2), *Sudāntasena* (1.5a–c and 8–9), *Suśruta* (often), *Svāmīdāsa* (1.14cd–15ab), *Tīsaṭcārya* (1.5a–c), *Vāgbhāta* (often), *Vāpyacandra* (1.4 and 5d–6; 1.8–9, twice; 1.11–13, twice; 1.15cd–18; 2.39; 28.2 and 3), *Varāha* (22.80), *Videha* (2.1, 26–30ab, 42–47; 8.11; 18.10–11; 20.18, twice; 20.24 and 26; 22.22–26), *Vṛddhabhoja* (14.4), *Vṛddhasuśruta* (2.4–7, 26–30ab, 37–38, 39, 42–47; 26.1), and *Vṛddhavāgbhāta* (1.8–9; 2.66cd–74ab).

Authorities and works quoted or referred to by Śrīkaṇṭhadatta in his part of the *Madhukośa* are: *Agniveśa* (44.1), *Ālambāyana* (69.21cd–25ab and 28), *Bhāluki* (44.9–10; 49.37–39), *Bhoja* (33.27–28, four times; 33.34cd–35, twice; 37.7cd–11ab, twice; 38.8cd–9ab, 15, 16–17, 25, 26; 40.10cd–11ab and 17cd–20; 46.1 and 6; 49.17cd–23ab, 25cd–30, 37–39; 52.22cd–24 and 25; 53.3–8ab; 55.1; 55, 11, twice; 55.12, 22–24, 26, 28–29, 32; 55.36, twice; 55.38, 40cd, 41–43, 44–45ab; 55.45cd–47, twice; 55.50–51; 56.1, 9cd–10ab, 15, 27, 35cd–36ab; 56.38, four times; 56.47, 48, 54; 64.2 and 6), *Cakra* (55.12), *Cakṣuṣya* (59.88 and 92; 60.6), *Candrikākāra* (59.95 and 97–98), *Caraka* (often), *Gadādhara* (33.13–15ab, 22, 23–25, 34cd–35; 35.15d–17, 21–22c, 22d–24; 41.12; 46.8; 48.1 and 16; 49.17cd–23ab; 56.10–11, 15, 47; 58.1; 59.17, 25, 33cd–35ab, 41ab, 41cd–46, 50cd–51ab, 59, 62cd–64, 65ab, 69cd, 71, 88; 60.1 and 6; 64.7; 69.30–31), *Gayadāsa* (55.36), *Hārīta* (40.17ab; 61.6–7), *Hiranyākṣa* (61.6–7; 68.23), *Īśāna* (33.4), *Jatūkarṇa* (55.12), *Jejjāta* (35.22d–24; 40.11cd–16; 46.2–3ab; 49.17cd–23ab, 25cd–30, 37–39), *Kālyāṇavinīścaya* (59.67cd and 97–98), *kāmasāstra* (47.1), *Karāla* (59.17), *Kārttika* (33.34cd–35; 36.17–20; 38.18–20ab; 45.2cd; 55.28–29; 56.22, 23, 53; 57.5; 58.1; 59.14, 22, 24, 33cd–35ab, 49; 59.50cd–51ab, twice; 59.59, 62cd–64, 65cd, 73ab, 74b–d, 75, 86, 89; 69.21cd–25ab, twice; 69.30–31), *Kharanāda* (56.38), *Kṣārapāṇi* (36.17–20), *Mādhava(kara)* (45.6cd; 59.96; 60.9–10),²³⁶ *Nimi* (57.8; 59.29, 41ab, 65ab, 80; 60.8), *Ravigupta* (59.67cd), *śālākya* (60.1), *Samgrahakāra* (38.9cd–10; 56.27),²³⁷ *Sātyaki* (59.47–48ab, twice; 59.94 and 95; 66.11–13),²³⁸ *Suśruta* (often), *Vāgbhāta* (often), *Vāpyacandra* (33.7cd–12), *Vātsyāyana* (48.1), *Videha* (55.28–29, twice; 55.30; 56.55; 57.1, 2–3, 4, 6–7; 58.2, 15, 28; 59.15, 18; 59.22, twice; 59.26, three times; 59.28, 29, 33cd–35ab, 47–48ab; 59.60cd–61ab, twice; 59.69cd, 70ab, 70cd, 73cd, 74b–d, 75, 76, 79, 81, 85, 87, 88, 93, 97–98; 60.6 and 8; 60.11–13, twice; 60.14–15; 61.6–7), *Viśvāmītra* (49.37–39), and *Vṛddhakāśyapa* (69.33–34).

Vijayarakṣita is quoted by Nīścalakara,²³⁹ Priyavrat Śarmā,²⁴⁰ and Śivadāsase-

na.²⁴¹ He is referred to by Śailendrasimha.²⁴² The author of the *Madhukośa* (madhukośakṛt) is cited in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya* and in the commentary on the *Āyurvedābhdhisāra*.²⁴³

Works and authors quoting the *Madhukośa* are: the commentary on the *Āyurvedābhdhisāra*,²⁴⁴ a gloss on Bhāvamiśra's *Bhāvaprakāśa*,²⁴⁵ the *Brhannighaṇṭurātākāra*,²⁴⁶ Gulrājsarmamiśra's *Viśikhānupraveśavijñāna*, Kāśirāma,²⁴⁷ Priyavrat Śarmā's auto-commentary on the *Āyurvedadarśana*, Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, and Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍiparikṣā*. The *Madhukośa* is referred to in Vācaspati's *Ātanikadarpana*.

It is a matter of uncertainty why Vijayarakṣita left his commentary unfinished, though serious consideration should be given to the possibility that death intervened. It is rather generally assumed that Vijayarakṣita was a native of Bengal, which appears to be reasonable, since Niścalakara, who belonged to that region, mentions him as an āyurvedaguru in the introductory verses of his *Ratnaprabhā*. As Vijayarakṣita is called ārogyaśāliyavaidyapati in the colophons of some old MSS of the *Madhukośa*,²⁴⁸ he is thought to have been in charge of a hospital (ārogyaśālā).²⁴⁹ The maṅgalācārāṇa of the *Madhukośa*, addressed to Harihara, shows that the author professed Hinduism, which is confirmed by his rejection of a Buddhist theory of knowledge.²⁵⁰

Concerning Vijayarakṣita's date one should recall that he refers to Cakrapāṇidatta as one of his sources, which permits us to fix the terminus post quem at about A.D. 1060. A disputed piece of evidence is an old MS of the *Nidāna*, completed in Nepal under the reign of king Jayaratnamalla on December 27, A.D. 1210,²⁵¹ the name of the work is *Śāstramadhukośa* in the colophon, though it only contains the text of the *Nidāna* with a line-by-line Newari translation; D.Ch. Bhattacharyya claimed that this MS testifies to the reputation of the *Madhukośa* in Nepal shortly after 1200.²⁵² An important clue to the date of Vijayarakṣita is provided by Niścalakara, who states that he started writing his commentary on the *Cakradatta* after Vijayarakṣita's death. This makes the latter's terminus ante quem depend on that of Niścalakara, who wrote his commentary in the first half of the twelfth century according to D.Ch. Bhattacharyya, which would make it possible to establish Vijayarakṣita's date at about A.D. 1100. P.V. Sharma, who disagrees with D.Ch. Bhattacharyya's chronological scheme, which makes Rāmapāla the patron of Vijayarakṣita,²⁵³ fixed his date at about A.D. 1200;²⁵⁴ later, the same author preferred placing him during the reign of Viśvarūpasena or Keśavasena,²⁵⁵ the last notable kings of the Sena dynasty.²⁵⁶ G. Hāldār²⁵⁷ regards Vijayarakṣita as the son of a daughter of Keśavasena, which would make him live in the second half of the thirteenth century. J. Jolly²⁵⁸ even supposed the *Madhukośa* to have been written in the fourteenth or fifteenth century.

Vijayarakṣita's date ultimately depends on the period of time that elapsed between his death and the composition of Niścalakara's *Ratnaprabhā*. Niścalakara declares that he decided to write his work because the interpretation of the *Cakradatta* had become obscured after the demise of the āyurvedaguru Vijayarakṣita. P.V. Sharma asserts that this remark proves that in Vijayarakṣita's times the *Cakradatta* was studied, next to Vṛnda's *Siddhayoga*, but had not yet become authoritative, as attested by the fact that Śrīkaṇṭhadatta, who is later than Vijayarakṣita, chose to comment on the *Siddhayoga*.²⁵⁹

Vijayarakṣita, however, quotes Cakrapāṇidatta, whose treatises were available to him.

Vijayarakṣita's intimate acquaintance with the *Cakradatta* is attested by some quotations in the *Ratnaprabhā*, if Rakṣitapādāh is identical with Vijayarakṣita. Niścala's remarks on Rakṣitapādāh's opinion ad grahaṇī 4²⁶⁰ and 13²⁶¹ may refer to Vijayarakṣita. The same applies to the quotations ad arśas 100–103,²⁶² agnimāndya 5,²⁶³ krimi 5,²⁶⁴ and nāḍivraṇa 5.²⁶⁵ A crucial passage is found in the *Ratnaprabhā* ad pāṇḍuroga 35–40, where Niścala reproduces a variant of verse 40, read by Rakṣitapādāh. Pāṇḍuroga 40 consists of an addition of Cakra, called a tippanī, to 35–39 (the formula of tryūṣaṇā-dimaṇḍūra), quoted from the *Carakasamhitā* (Ci. 16.73–77). Cakra's tippanī is absent from the *Siddhayoga*,²⁶⁶ which proves that Rakṣitapādāh disposed of the text of the *Cakradatta*. The identity of Niścala's Rakṣitapādāh with Vijayarakṣita is supported by the remarkable similarity between his views and those of his pupil Śrīkaṇṭhadatta as expressed in the latter's *Kusumāvalī*.

Some of Niścala's quotations are not from Rakṣita's interpretation of the *Cakradatta*, but from a medical treatise that had chapters on pharmaceutical preparations, weights and measures, etc.²⁶⁷

D.Ch. Bhattacharyya set up the hypothesis that Niścalakara was one of Vijayarakṣita's pupils.²⁶⁸ His main argument is the mention of Vijayarakṣita as an āyurvedaguru in the introductory verses of the *Ratnaprabhā*. P.V. Sharma rejects this view, advancing that the introductory verses mean to say that Niścala wrote his commentary after a considerable interval of time had passed since Vijayarakṣita's death, during which period the interpretation of the *Cakradatta* had suffered from bad explanations.²⁶⁹ Niścala's own words, however, do not hint at Vijayarakṣita's death as an event that occurred a long time ago, but only express that his commentary will make the precious *Cakradatta* recover the splendour (tviṣ) that got lost owing to bad interpretations (kubodha) since the guru Vijayarakṣita passed away. He adds that he plans to achieve this aim by consulting other treatises and by having recourse to the words of his guru (gurūkti). He does not inform his readers who his guru was, although the latter is repeatedly quoted and referred to.²⁷⁰

Niścalakara belonged to the tradition established by Vijayarakṣita according to P.V. Sharma, who is of the opinion that this tradition is referred to as guruparamparā and gurusampradāya in the *Ratnaprabhā*.

Earlier, A.F.R. Hoernle²⁷¹ had dated Vijayarakṣita to about A.D. 1240, on insufficient grounds, which were refuted by D.Ch. Bhattacharyya.²⁷² Hoernle's opinion on Vijayarakṣita's date was based, amongst other things, on the rejection of a certain doctrine concerning the structure of the eye in the *Madhukośa*.²⁷³ He was wrong in attributing this rejection to Vijayarakṣita, because it is found in the latter part of the *Madhukośa*, due to Śrīkaṇṭhadatta. Furthermore, he supposed that the doctrine in question, not ascribed to a named authority, derived from Aruṇadatta, whereas the latter, who may have lived in the same age as Vijayarakṣita and Śrīkaṇṭhadatta,²⁷⁴ is not quoted in the *Madhukośa*. Since Hoernle determined Aruṇadatta's date as about A.D. 1220, he fixed Vijayarakṣita's date at about A.D. 1240.²⁷⁵ Another point put to use by Hoernle in order to establish Vijayarakṣita's date was a quotation from Guṇākara in the *Madhukośa*,²⁷⁶ wrongly regarded by him as the author of the *Yogaratanmālā*, written in 1239. Actu-

ally, the medical author Guṇākara, quoted by Vijayarakṣita, is entirely different from the Jaina scholar of the same name who wrote a commentary on the *Yogarātnamālā* in 1239/40. These remarks may suffice to demonstrate that Hoernle's manner of determining Vijayarakṣita's chronological position can now be disregarded.

A precise determination of Vijayarakṣita's date remains fraught with problems, but no doubt exists regarding his relative chronological position between Cakrapāṇidatta and Śrīkaṇṭhadatta, which means that he lived in the twelfth century.

Śrīkaṇṭhadatta wrote, besides the latter half of the *Madhukośa*, a commentary on Vṛnda's *Siddhayoga*. He was a pupil of Vijayarakṣita, as stated in the introductory verses to his part of the *Madhukośa*, and probably completed the task of his teacher after the latter's death, which implies that he lived in the twelfth century.²⁷⁷ P.V. Sharma suggests that Śrīkaṇṭha was the grandfather of Nīścalakara.²⁷⁸

A medical authority Śrīkaṇṭha, who was the author of the *Amṛtavallī*, is quoted by Nīścalakara.²⁷⁹ Some regard him as identical with the commentator,²⁸⁰ which is not defensible, because Nīścala informs us that this Śrīkaṇṭha preferred a particular reading of a verse of the *Siddhayoga* on the strength of a *ṭippanī* of Vṛnda, which is in this case a remark found in Śrīkaṇṭhadatta's *Kusumāvalī*;²⁸¹ this proves that the author of the *Amṛtavallī* is posterior to Śrīkaṇṭhadatta. The *Amṛtavallī* was a therapeutic treatise in verse, as shown by Nīścala's quotations.²⁸²

Vācaspati

Vācaspati's commentary on the *Mādhavanidāna*, called *Ātaṅkadarpaṇa*,²⁸³ is not a very original work, as it frequently follows earlier writers²⁸⁴ and leans heavily on the *Madhukośa*.²⁸⁵

Authorities and works quoted or referred to by Vācaspati are: *Abhidhāna* (55.38),²⁸⁶ *abhidhānāntara* (2.10–11;²⁸⁷ 17.1–5),²⁸⁸ *Ālamvāyana* (69.21cd–25ab and 28), *Aruṇadatta* (2.56–57), *Bakula* (6.15), *Bhāluki* (2.18–23; 2.24, twice; 2.74; 44.9–10), *Bhāṭṭārahariścandra* (28.3),²⁸⁹ *Bheda* (2.37–38; 60.14–15), *Bhoja* (3.21; 5.1; 17.14–15ab; 18.4–6; 37.7cd–11ab; 38.1, 8cd–9ab, 15, 16–17, 25, 26; 40.10cd–11ab; 46.6; 49.17cd–23ab and 25cd–30; 56.1, 9cd–10ab, 15, 28–29, 35cd–36ab, 36cd–37, 38, 47, 48, 54; 49.37–39; 52.22cd–24 and 25; 53.3–8ab; 55.3, 12, 22–24, 26; 55.36, twice; 55.38, 40cd, 41–43, 44–45ab, 45cd–47, 50–51; 64.2 and 6), *Bhṛgu* (introduction), *Brahmavidyārahasya* (introduction),²⁹⁰ *Cakra* (5.31–32; 8.8–10; 20.5), *Cakṣuṣya* (59.88), *Candranandana* (2.56–57), *Caraka* (passim), *Ḍalhaṇa* (21.8–9; 43.3; 56.27; 57.16; 69.4–8ab), *Dr̥ḍhabala* (2.18–23; 8.2; 12.1–2; 16.8cd, twice; 17.15cd–16ab; 22.12–13 and 44–47ab; 24.1–5; 29.6; 32.1–3a), *Gadādhara* (2.18.23 and 42–47; 3.9–10; 5.31–32; 10.19; 22.38cd–39ab and 39cd–41; 28.2; 33.23–26; 35.15d–17; 48.1 and 16; 56.10cd–11 and 15; 59.17),²⁹¹ *Gajavaidyaka* (2.1),²⁹² *Gautama* (5.33–34), *Gayadāsa* (2.18–23 and 40; 9.11; 12.8 and 11–14; 16.1–2; 22.59cd–60ab, 68cd–70ab, 70cd–72; 28.3; 29.2),²⁹³ *Guṇākara* (2.31–32), *Hariścandra* (28.3),²⁹⁴ *Hārīta* (2.15cd–16, 26–30ab, 37–38; 3.21; 16.5; 26.1; 40.17ab; 61.6cd–7), *Harivaṃśa* (2.1), *Hiraṇyākṣa* (61.6cd–7; 68.23), *Īśāna* (22.22–26 and 54–55ab; 23.1–3), *Jagadvaidyaka*,²⁹⁵ *Jejjāta*

(2.34–36ab, 37–38, 42–47; 8.8–10; 9.6–7ab; 10.21–29ab; 12.8, 11–14, 18–20, 27–34, 35–36; 16.10; 17.6; 18.22cd; 19.7; 20.4, 5, 29; 22.6–8 and 70cd–72; 24.1–5; 28.2, 3, 15–16; 29.2), *jiyotiṣśāstra* (18.10–11), *Kāmasūtra* (47.1), *Kāṇāda* (introduction), *Kapila* (introduction), *Karāla* (59.17), *Karavīracārya* (3.14–19), *Kārttika* (22.64cd, 68cd–70ab, 72; 55.28–29; 56.22; 58.1; 59.14 and 59; 69.30–31), *kāśmīrāḥ* (10.5), *Kāśmīrapāṭha* (2.18–23), *Kharanāda* (2.34–36ab), *Kṣīrapāṇi* (28.3; 36.17–20), *Mādhava(kara)* (5.31–32; 6.23; 17.20; 23.14–18; 59.96; 69.39–41ab), *Mādhavasamgraha* (introduction), *Madhukośa* (introduction; 2.61cd–65), *Nimi* (57.8; 59.29, 41ab, 70ab, 80, 85, 87), *Parāśara* (3.21), *Samgrahakāra* (56.20 and 28–29), *Sātyaki* (59.47), *Suśruta* (passim), *Tārkikavara* (introduction), *Vāgbhaṭa* (often), *Vāpyacandra* (2.39; 28.2 and 3; 33.7cd–12), *Varāhamihira* (22.80), *Vārttika* (2.32cd–33),²⁹⁶ *Vātsyāyana* (48.1), *Videha* (2.1, 26–30ab, 42–47; 8.11; 14.2; 18.10–11; 20.18, 24, 25; 55.28–29 and 30; 56.55; 57.1, 2–3, 4, 6–7; 58.2, 7, 9cd, 10, 15, 20cd–21ab; 59.15, 18, 22, 26, 28, 29, 33cd–35ab, 60cd–61ab, 66, 69cd, 70cd, 73cd, 74, 75, 76, 88, 92, 97, 93; 60.6 and 11–13; 61.6cd–7), *Vṛddhabhoja* (14.4), *Vṛddhakāśyapa* (69.33–34), and *Vṛddhasuśruta* (2.34–36ab and 42–47; 26.1).²⁹⁸

A Vācaspati is quoted in Ṭoḍara's *Āyurvedasaṅkhyā*²⁹⁹ and in the *Vīrasimhāvaloka*.³⁰⁰

In the introduction to his commentary the author informs us that his father, Pramoda, was chief physician at the court of Hammīra, and that his elder brother, Raiśarman, was one of the paṇḍits at the court of Muhammad.³⁰¹

Vācaspati's father's patron, Hammīra, was identified by Hoernle³⁰² as Amīr Mu'izzuddīn Muḥammad, i.e., Muḥammad Ghorī, who reigned in Delhi from A.D. 1193 to 1206.³⁰³ As pointed out by P.V. Sharma³⁰⁴ and J. Filliozat,³⁰⁵ this identification cannot be maintained. P.V. Sharma holds that Hammīra was the famous king of Raṇṭhambhor (Raṇastambhapura) (A.D. 1283–1301),³⁰⁶ the last of the Cāhamānas, to whom the *Hammīramahākavya* by the Jain author Nayacandrasūri³⁰⁷ is devoted, and who was attacked, defeated and killed by 'Alā-ud-Dīn Khaljī. Raiśarman is supposed to have resorted to the court of Muḥammad b. Tughluq (1325–1351),³⁰⁸ i.e., the Muhammad mentioned by Vācaspati, after Hammīra's defeat and death. P.V. Sharma dates Vācaspati therefore to about A.D. 1340.³⁰⁹ J. Filliozat, rightly observing that several persons called Hammīra are known in Indian history, is inclined to see Pramoda's patron Hammīra as the Mahārāṇā of Mewār, who recovered Chitor, several years after 'Alā-ud-Dīn had reduced it to submission in 1303.³¹⁰ J. Filliozat identified Raiśarman's patron as Muḥammad Shāh I Bahmanī, who reigned from A.D. 1358 to 1377.³¹¹ He concluded that Vācaspati must have written his commentary around the middle of the fourteenth century. The quotations in this commentary are not of much avail in establishing his date, since the latest author quoted by him is Ḍalhaṇa.

Chapter 6 Vṛnda

Vṛnda is the author of the *Siddhayoga*.¹

Contents

The *Siddhayoga* is a work on therapeutics in 3,728 verses and some prose,² arranged in eighty-two chapters.

The first verse is in praise of Śiva and Caṇḍī, Dhanvantari, Suśruta and other sages, and Ātreya. The author declares in the second verse that the order of the diseases in his work will agree with the scheme of (Mādhava's) *Gadaviniścaya* (i.e., the *Mādhavanidāna*), and that he is going to set forth therapeutic procedures from various sources,³ accompanied by remarks suited to the occasion.⁴ After twenty-one verses on general principles of pathology and therapy, Vṛnda proceeds with the treatment of fevers, the main subject of chapter one, which is followed by sixty-seven more chapters, arranged for the greater part, in fact, along the lines of the *Mādhavanidāna*. The treatise ends with chapters on rasāyana (69) and vājīkaraṇa (70), a series of nine chapters on sneha, sveda, vamaṇa, virecana, bastividhi, nirūha, dhūmavidhi, nasya, and kavala, and three chapters on aṣṭa, svastha, and various topics (miśraṇa).⁵ Usually, the chapters are almost exclusively on therapy, but some stray verses on symptomatology, etc., appear occasionally.⁶ Diseases not dealt with in earlier works are, however, fully described as to their pathogenesis, symptoms, etc.

Although Vṛnda adopted Mādhava's scheme, the arrangement of the chapters of the *Siddhayoga* differs slightly from that of the *Rogaviniścaya* in having a separate chapter on jvarāsisāra (2), separate chapters on śūla (26) and pariṇāmasūla (27), udāvarta (28) and ānāha (29), udara (37) and śothodara (38),⁷ bālaroga (66) and bālagraha (67). On the other hand, there are only two chapters on vraṇa, namely vraṇaśoṭha (44) and āgantuvraṇa (45),⁸ and three on women's diseases, namely pradara (63), yoniroga (64),⁹ and strīroga (65).¹⁰ The disease called yonikanda, introduced by Mādhava in a separate short chapter, is mentioned once under the name of bhagaphala.¹¹ Vṛnda failed to deal with the treatment of a number of kṣudrarogas, namely yavaprakhyā, kakṣā, niruddhaprakāśa, agnirohiṇī, and samniruddhaguda.¹²

The contents of Vṛnda's work appear to be taken largely from earlier works, in conformity with his own statement on this matter, but he does not specify his sources, except for a few isolated occurrences, where Caraka,¹⁴ Jejjāta,¹⁵ Vāgbhaṭa,¹⁶ and the vṛddhavaidyāḥ¹⁷ are mentioned.

Vṛnda's sources have not yet been studied in detail,¹⁸ but it is clear from a com-

parison with the *Cakradatta* and Niścala's commentary on that work that he borrowed extensively from Caraka,¹⁹ Suśruta,²⁰ Vāgbhaṭa,²¹ and Ravigupta's *Siddhasāra*.²²

Some other sources are: Acyuta's *Āyurvedasāra*,²³ Amitaprabha,²⁴ *Amṛtamālā*,²⁵ an *Asvavaidyaka*,²⁶ Bhadravarman,²⁷ Bhāluki,²⁸ Bhela,²⁹ Bindusāra,³⁰ Cakṣuṣyeṇa,³¹ Carakottaratantṛa,³² *Cikitsāśāstra*,³³ Hārīta,³⁴ Kṛṣṇātreya,³⁵ *Madhyavāgbhaṭa*,³⁶ *Nāvanīṭaka*,³⁷ Puṣkalāvata,³⁸ Ugrasena,³⁹ Videha,⁴⁰ and *Yogaśāstra* (ka).⁴¹

One verse may derive from the *Mahābhārata*.⁴² One stanza may be based on an explanation in prose by Udbhaṭa.⁴³

The *Mādhavacikitsā*, however, was probably unknown to Vṛnda.⁴⁴

Vṛnda's activity was not restricted to the collection and selection of appropriate verses from predecessors. As he mentions himself at the beginning of his treatise, he intended to add suitable remarks to the prescriptions taken from various sources. A series of remarks in the commentary on the *Siddhayoga* amply proves that this intention was carried into effect. A number of verses or parts of verses are explicitly attributed to Vṛnda,⁴⁵ and, as one of these is called a *tippanikā* of Vṛnda,⁴⁶ it may be justified to assume that other verses, similarly called *tippana* or *tippanī*,⁴⁷ also derive from the author.⁴⁸ Niścalakara twice quotes a *Vṛndaṭippanī* in his *Ratnaprabhā*.⁴⁹

Some verses composed by Vṛnda can be identified by help of the commentaries of Niścalakara and Śivadāsasena on the *Cakradatta*.⁵⁰ Some more contributions of Vṛnda are easily recognized as such.⁵¹

Remarks of Vṛnda, expressing his own opinion on particular subjects, conflicted occasionally with the views or explanations of other authorities, and were not always to the liking of the commentator on the *Siddhayoga*.⁵² Niścala and Śivadāsasena indicate, in their commentaries on the *Cakradatta*, that Cakrapāṇi incidentally modified Vṛnda's verses.⁵³ Both commentators repeatedly criticize Vṛnda's views.⁵⁴

Śivadāsasena repeatedly employs the term *vṛndaṭippanī* or *-tippanikā* when he refers to the *Vyākhyākusumāvalī*.⁵⁵ This illustrates that the terms *tippana*, etc., were used both to denote short remarks by a compiler like Vṛnda, and comments by a later author on the work of a predecessor, like, for example, the *Lakṣmaṇaṭippanaka* on the *Suśrutasaṃhitā*, quoted by Ḍalhaṇa.⁵⁶

Authors and works quoting from or referring to Vṛnda are: Āḍhamalla,⁵⁷ Ananta in the *Pratāpakaḥpadrūpa*, Āśubodha and Nityabodha Senagupta in their commentary on the *Rasaratnasamuccaya*, Bhāvamiśra,⁵⁸ Devasiṃha Viṭṭhal in his *Bṛhadāsavāriṣṭasamgraha*,⁵⁹ Gopāladāsa in the *Cikitsāsmṛta*, Gopāladāsa Vāḍindra in the *Cikitsāsāra*,⁶⁰ Harṣakīrti in the *Yogacintāmaṇi*, Hemādri,⁶¹ Jagannātha in the *Yogasamgraha*, Jayaratna in the *Jvaraparājaya*, Jñārasarāmaśarman's version of the *Amṛtasāgara*,⁶² Karandīkar's *Nidānadīpikā*,⁶³ Kāśīrāma,⁶⁴ Lakṣmīrāma,⁶⁵ Meghamuni in the *Meghavinoda*, Niścalakara,⁶⁶ the *Pākamārtaṇḍa*,⁶⁷ Rāmacandra's *Rāmaṇinoda*, the *Ratnasāgara*, Śivadāsasena in his commentary on the *Cakradatta*,⁶⁸ Śivamiśra in the *Vaidyaśāstraśivānubhava*, Ṭoḍara,⁶⁹ Trimalla,⁷⁰ Kṣemāditya Paṇḍita Vāsudeva in the *Vāsudevānubhava*, Viṣṇudeva in the *Rasarājajalakṣmī*, the *Yogarātnākara*,⁷¹ and Yogīndranāthasena in his commentary on the *Carakasamhitā*.⁷²

A *Vṛddhāvṛnda* is quoted in Vācaka Dīpacandra's *Laighanapathyanirṇaya*. The au-

thor of the *Siddhayoga* is referred to as Vṛndakuṇṭha by Śrīkaṇṭhadatta in the introduction to his commentary on the work. Niścalakara and Śivadāśasena⁷³ call him sometimes Vṛndakuṇṭha.

Authors and works quoting from or referring to the *Siddhayoga* are: Anantakumāra,⁷⁴ Āśubodha and Nityabodha Senagupta in their commentary on the *Rasaratnasamuccaya*, the *Bhesajjamañjūsāsanaya*, Hemādri,⁷⁵ Niścalakara,⁷⁶ Śivadāśasena,⁷⁷ and Yogīndranāthasena in his commentary on the *Carakasamhitā*.⁷⁸ The Vṛndamādhava (i.e., the *Siddhayoga*) is quoted in Rājeśvaradatta Miśra's *Svasthavṛttasamuccaya*; it was one of the sources of the *Bheṣajasamhitā*, *Rasayogasāgara*, and *Rasoddhāraṇtra*.

Vṛnda's work is called *Vṛndasamgraha* in Niścalakara's *Ratnaprabhā*,⁷⁹ Raṅgajyotirvid's *Vicārasudhākara*, Śivadāśasena's commentary on the *Cakradatta*,⁸⁰ and the *Vīrasaṃhāvaloka*. It is also recorded in manuscript catalogues as *Vṛndagrantha*,⁸¹ *Vṛndavaidyaka*,⁸² *Vṛndavaidyakaśāstra*,⁸³ and *Vīravṛndabhaṭṭa's Vṛnda*.⁸⁴ *Vṛndamādhava* is a second title of the *Siddhayoga*.⁸⁵ Manuscript catalogues mention a *Vaidyavṛnda*,⁸⁶ *Vṛndasamhitā*,⁸⁷ and *Vṛndasindhu*,⁸⁸ works which may or may not be identical with the *Siddhayoga*. A *Pathyāpathyavidhi* by Vṛnda is also known,⁸⁹ as well as a *Siddhayogasamgraha*, said to be an abridgment of the *Siddhayoga* by the author himself.⁹⁰

The quotations prove that Vṛnda's work became well known and remained popular, at least until the times of Cakrapāṇidatta.⁹¹ Later, Hemādri still quoted from it extensively.

Special features⁹²

The *Siddhayoga* contains the earliest descriptions of two new diseases, snāyukaroga and vardhma.

The pathogenesis, symptoms and treatment of snāyukaroga, i.e., dracontiasis or the Guinea worm disease,⁹³ caused by the infestation of the human organism by a nematode, *Dracunculus medinensis* Linn., is lucidly described in the last part of the chapter on visphoṭa (55.15–19). The commentary refers to the fact that this disorder is prevalent among the inhabitants of western countries.⁹⁴

The aetiology, etc., of vardhma is dealt with in the chapter on vṛddhi (40.20–23). This disorder, incidentally referred to earlier,⁹⁵ acquired an independent status after Vṛnda characterized it as such.⁹⁶ The identity of this disease, showing distinctive swellings in the groins, has still to be determined.⁹⁷

Vṛnda employs the term niścāraka for a type of diarrhoea.⁹⁸ The vāta disease called kubjatva (hump-backedness), absent from the *Mādhavanidāna*, but mentioned by Caraka⁹⁹ and Vāgbhaṭa,¹⁰⁰ is described by Vṛnda (22.34).

Noticeable features of the *Siddhayoga* with respect to treatment are: the prescription, probably the earliest one recorded, of pārasīyavāṇī¹⁰¹ against worms inside the body (7.1) and of an ointment made of the juice of dhattūra¹⁰² and mercury (rasendra) against lice (7.13); a decoction of aśoka bark is prescribed against uterine bleeding (63.5);¹⁰³ the medicine against eye diseases called nāgārjunavarti, the formula of which is said to have been written by Nāgārjuna on a pillar in Pāṭaliputra (61.148–152), may be

found for the first time in the *Siddhayoga*.¹⁰⁴ Many more recipes occurring in Vṛnda's work are remarkable and deserving of further study.¹⁰⁵

The *Siddhayoga* is one of the earliest therapeutic works to prescribe ābhā.¹⁰⁶ Interesting is the use of the plant name kāmācī instead of kākāmācī¹⁰⁷ and the description of the plant called vārāhikanda.¹⁰⁸ Opium and Cannabis are absent from Vṛnda's materia medica and iatrochemistry is still of small importance.¹⁰⁹

Religious elements are not uncommon in the treatments described in the *Siddhayoga*.¹¹⁰ A yantra, called ubhayatrimśaka, is also described.¹¹¹ Prāṇāyāma is recommended in patients suffering from śūla.¹¹² A single reference to sūnyatā may point to Vṛnda's acquaintance with Buddhist doctrines.¹¹³

A single piece of evidence is sometimes considered to indicate that an author called Vṛnda wrote some explanatory work. This evidence consists of a remark in the *Kusumāvalī*, relating to a group of verses from the *Carakasamhitā*,¹¹⁴ which says that Vṛnda explained a particular compound as a dvandva.¹¹⁵

The author

No particulars about Vṛnda are known, except that he may have lived in Eastern Bengal,¹¹⁶ i.e., the country now called Bangla Desh. Niścalakara mentions that Vṛnda belonged to Varendra, a region referred to in the *Siddhayoga*.¹¹⁷ Confusion on the identity of the author of the *Siddhayoga* was formerly created by Hoernle, who held the opinion that the treatise had been written by Mādhavakara, and claimed that the *Rogaviniścaya* and the *Siddhayoga* were clearly the two parts of a single work by one author.¹¹⁸ Hoernle was unaware of the existence of the *Mādhavacikitsā*.

P.V. Sharma¹¹⁹ is convinced that there were two medical authors of the name of Vṛnda, namely the author of the *Siddhayoga* and a later one, called Vṛndakuṇṭha, who probably descended from Kārttikakuṇṭha. He regards the latter, quoted by Niścalakara and Śivadāśasena, as the author of a commentary on the *Carakasamhitā*, known as *Vṛndaṭīkā* or *-ṭippaṇa*, referred to by Ādhamalla.¹²⁰ The evidence available is not strongly in favour of this hypothesis. Niścalakara and Śivadāśasena seem to refer indiscriminately to Vṛnda and Vṛndakuṇṭha, and Ādhamalla mentions an author of glosses, who may well be the author of the *Siddhayoga* himself. A *Vṛndaṭīkā* is quoted in the *Bhāvaprakāśa*.¹²¹

G. Hāldār claimed that Vṛndakuṇṭha, also called Vṛndāvana, was the author of the *Vṛndasindhu* (i.e., the *Siddhayoga*, accompanied by a *ṭippaṇa*) and a work called *Padaviniścaya*.¹²²

Date

Regarding the date of the *Siddhayoga* J. Jolly¹²³ rightly remarked that it must have been composed at least a century before Cakrapāṇidatta, because it had become an authoritative work in the latter's time. The reference to Mādhava's *Rogaviniścaya* in the *Siddhayoga* implies that Vṛnda is posterior to Mādhava. D.Ch. Bhattacharyya¹²⁴

based his date of Vṛnda (A.D. 975–1000) on the absence of borrowings from Māhuka's *Haramekhālā* (dated by him in A.D. 965) and from Candrāṭa (dated by him in A.D. 950), both quoted in Cakrapāṇidatta's *Cikitsāsāṃgraha*.¹²⁵ He concluded that Vṛnda must have been a contemporary of Candrāṭa and Māhuka, though his arguments do not preclude an earlier date. P.V. Sharma¹²⁶ places Vṛnda in the ninth century on account of the mention of Jejjāṭa in the *Siddhayoga*.¹²⁷ Jejjāṭa's date, however, is earlier in my opinion. The allegation, emanating from M.Z. Siddiqi,¹²⁸ that the *Siddhayoga* is referred to by Ibn Wāḍiḥ al-Ya'qūbī,¹²⁹ who lived in the second half of the ninth century, can be dismissed, since the work mentioned by this Arab author proves to be Ravigupta's *Siddhasāra*.¹³⁰

The conclusion to be drawn concerning Vṛnda's date is that he lived later than Mādhava, the author of the *Nidāna*, and earlier than Cakrapāṇidatta, probably in the period 800–950.¹³¹

A work related to the *Siddhayoga* is Balibhadra's¹³² *Vṛndasāṃgrahaśeṣa*, known in a single, old, incomplete MS.¹³³

Commentaries

The only commentary on the *Siddhayoga* that has been preserved is the *Vyākhyā-kusumāvalī*.¹³⁴ Stray evidence shows that this has not always been the case, for the *Kusumāvalī* contains two references to an earlier commentary,¹³⁵ and Śivadāsena's commentary on the *Cakradatta* quotes Candrāṭa's *Vṛndaṭīkā*.¹³⁶ Furthermore, Āḍhamalla¹³⁷ cites the author of a *ṭippaṇa* on Vṛnda, whose opinions disagree with those found in the *Kusumāvalī*. Hemādri's quotations from Vṛnda contain short remarks which impress as being from an unknown commentary.¹³⁸

P.K. Gode¹³⁹ assumed that a commentary on the *Siddhayoga* had been written by Brahmadeva, an author often quoted in the *Kusumāvalī*.¹⁴⁰ Careful study of these quotations¹⁴¹ revealed that the majority refer to verses taken from or inspired by *Suśruta*, which shows that Brahmadeva's commentary on the *Suśrutasaṃhitā* is concerned. The idea, put forward by P.V. Sharma,¹⁴² that Naradatta, Cakrapāṇidatta's teacher, wrote, besides a commentary on the *Carakasamhitā*, also one on the *Siddhayoga*, cannot be substantiated, being based on a single reference to a *Naradantavyākhyā*.¹⁴³

The *Vyākhyākusumāvalī*, as it is called in the introductory verses, or, for short, *Kusumāvalī*, is a highly valuable commentary, originally written by Śrīkaṇṭhadatta,¹⁴⁴ and, later on, enlarged by Nārāyaṇa. D.Ch. Bhattacharyya¹⁴⁵ was one of the first to observe that it had not generally been noticed that the *Kusumāvalī*, as it has come down,¹⁴⁶ is actually a revision by a later author, as is evident from its concluding verses where Nārāyaṇa states to have completed Śrīkaṇṭhadatta's commentary by adding notes from Ḍalhaṇa, etc. This statement led J. Jolly¹⁴⁷ astray, who claimed that the *Kusumāvalī* could not have been written before the fourteenth century.¹⁴⁸

A study devoted to this Nārāyaṇa was written by P.K. Gode.¹⁴⁹ At the end of the *Kusumāvalī*, Nārāyaṇa relates to be a brāhmaṇa of nāgaravaṃśa stock and a son of the

physician Bhābhalla.¹⁵⁰ The nāgaravaṃśa descent of Nārāyaṇa characterizes him as a resident of Gujārāt.¹⁵¹ The evidence collected by P.K. Gode points to Nārāyaṇa as the grandfather of Ananta, who wrote a work called *Kāmasamūha* in A.D. 1457/1458.¹⁵² This Ananta gives the following information on himself: he belonged to the nāgarajñāti, descended from Bhābhalla, was the son of the mantrin Maṇḍana, a grandson of Nārāyaṇa, and lived in a town founded by Ahimmada.¹⁵³ Indications found in the *Kāmasamūha* point to both Ananta and Maṇḍana being physicians.¹⁵⁴ The data available enable us to conclude that Nārāyaṇa lived towards the end of the fourteenth century.¹⁵⁵

The separation of the two layers present in the *Kusumāvalī* is a difficult task that, nevertheless, can partly be carried out by careful study of the quotations by authors who are earlier than Nārāyaṇa. Fortunately, Niścalakara's references to the views of his guru are for a large part in agreement with opinions expressed in the *Kusumāvalī*, which means that passages of the *Kusumāvalī* that verbally or almost verbally recur in the *Ratnaprabhā* as interpretations ascribed to Niścala's guru are old and not due to Nārāyaṇa.¹⁵⁶ The same applies to Niścala's quotations from Rakṣita (pādāḥ). This state of affairs appears to suggest that Śrīkaṇṭhadatta based himself on the interpretations of his teacher, Vijayarakṣita, in the composition of his commentary on the *Siddhayoga*, for Niścala's guru, by some supposed to be Vijayarakṣita himself, belonged to the line established by Vijayarakṣita and Śrīkaṇṭhadatta.¹⁵⁷

Another source of information is the *Cikitsāmrta* of Gopālādāsa. This author, who lived between A.D. 1350 and 1400, often refers to the *Kusumāvalī* and many (twenty-three) times to Śrīkaṇṭha. He preferred Niścalakara's interpretations (on verses common to *Siddhayoga* and *Cakradatta*) to those put forward by Śrīkaṇṭha in the many cases where the views of these scholars clashed.¹⁵⁸ Śivadāsena's references may also prove to be helpful, since he repeatedly quotes Śrīkaṇṭha(datta) in his commentary on the *Cakradatta*. The numerous citations from Aruṇadatta, Ḍalhaṇa and Hemādri in the *Kusumāvalī* can be put to the credit of Nārāyaṇa on the basis of chronological considerations.

Many notes on the names and the identity of medicinal plants from the *Kusumāvalī* were collected by Bāpālāl Vaidya.¹⁵⁹

Authors and works quoted or referred to in the *Kusumāvalī* are: Agastya (10.43–51; 80.3), Agniveśa (1.132; 21.5–6; 76.3ab), Ālambāyana (68.5), Aruṇadatta (1.9; 6.19cd; 69.6–7; 82.25), Ātreya (80.1 and 3), Bakula (1.119; 20.24–27), Bāṣpacandra (1.34–35 and 36–37; 6.20; 9.31; 36.17cd; 51.24–28; 72.8ef; 81.41, 42, 46, 48, 51, 52, 56ab), Bhadrāsaunaka (62.15–16; 75.2),¹⁶⁰ Bhagadatta (81.47), Bhāluki (1.151–152; 73.4; 74.33), Bhārata (1.244),¹⁶¹ Bhāskara (6.33–42), Bhaṭṭāraka(harīścandra) (6.120cd–121; 80.1 and 3; 81.42, 52, 59),¹⁶² Bhīmadatta (81.41),¹⁶³ Bhoja (1.140 and 254; 3.7–8; 41.49, three quotations; 71.10; 76¹.12; 76⁶.14; 77.8–9; 78.3 and 5), Bindusāra (1.206ab), Brahmadeva (1.25, 32, 54, 91, 102; 3.23; 30.56; 37.26–27; 47.6cd; 65.1–4; 69.1ab; 70.1; intr. to 76; 76¹.24–27; 76².1–2; 78².12–19), Cakra(pāṇi) (1.36–37, 52, 55, 76, 95, 114, 128, 157, 252, 254; 3.49–51 and 60–61; 4.17–18; 5.19–21, 50, 112ab, 113cd, 114, 120–121; 6.48–53; 8.23–27; 10.23–28 and 29–42; 12.31–35; 15.3cd; 21.10–14; 22.7–9, 13, 72, 74–78; 30.50–52; 47.19–20; 57.28 and 29; 58.29–31 and 65–66; 62.51–53; 70.22–30;¹⁶⁴ 71.13; 80.3),¹⁶⁵ Candranandana

(6.19cd; 9.31; 73.2), Candrāṭa (74.16–17),¹⁶⁶ Caraka (passim), Cyavana (10.29–42), Ḍalhaṇa (more than ninety quotations), *Dravyāvalī* (4.27cd–29; 15–17; 21.10–14), Ḍrḍhabala (1.140 and 266; 73.16; 74.20; 76¹.4 and 15; prose between 78.1 and 2; 81.46 and 47), Gadādhara (1.53, 67, 75; 5.112; 6.20 and 24; 16.2; 30.38–39; intr. to 31; 41.51; 46.4cd; 47.21; 57.29; 59.13–14; 61.7 and 193; 74.18 and 33), *Gadavinīscaya* (1.2), *gandhaśāstra* (58.65–66), Gayadāsa (23.62; 44.27; 74.33; 75.28; 76¹.11 and 12), Gayin (34.11–17; 41.49; 57.1; 61.13–14; 70.4; 71.2 and 9; 76⁶.9–10; prose between 78.1–2; 78.3; 81.72), Gomin (5.113ab),¹⁶⁷ *Gūḍhapadabhaṅga*(*tippanaka*) (41.49), *Haramekhala* (35.21), *Haramekhala* (57.84), Hariścandra (1.68; 6.9–10; 35.40–42; 77.1),¹⁶⁸ Hārīta (1.53ab and 62; 6.20; 8.1; 11.14–17), Hemādri (1.51–52; 6.19cd; 13.7–8; 82.25 and 27), Iṣāna(ḍeva) (1.21 and 233; 10.23–28; 19.1; 22.5cd; 36.17cd; 81.17 and 18; 82.27), Iṣvarasena (81.52), Jaijāta or Jejjāta (1.254; 4.25–26 and 30–35; 6.19ab and 33–42; 10.11–13; 15.17; 20.24–27; 22.72; 34.11–17; 41.49; 44.5, 27 and 32; 47.21; 49.1; 58.29–31; 61.60, 68, 118; 62.42; 71.10; 73.21; 74.33; 76².1–2; 80.1), Jātūkarṇa (1.63 and 121; 4.27cd–29; 10.23–28; 11.14–17; 37.26–27; 39.29–33; 58.65–66; 59.16–22; 61.6; 77.1), Jinadāsa (10.23–28; 44.32 and 55), *kāmaśāstra* (70.42), Kāṅkāyana (5.41–44), Kapibala (81.46), Karāla (59.13–14; 60.12–13), Kārttika(kuṇḍa) (1.40, 44ab, 67, 68, 231cd, 238, 254; 12.22–24; 14.1 and 2; 16.4 and 8; 17.9; 22.20; 30.16; 33.2 and 3ab; 37.42; 47.13; 48.5; 54.4; 57.29; 58.27 and 29–31; 59.30; 61.193; 70.8–9; 74.32; 75.33; 76¹.16), kāśmīrāḥ (74.16–17), Kāśyapa (3.16–17; 70.3; 75.27), *Kātantra* (20.28–29), Kharaṇādi (1.134; 6.19), Kṣṇātreya (4.15; 10.23–28; 20.28–29; 77.1; 79.1, 3, 12), Kṣārapāni or Kṣīrapāni (6.20; 30.60; 37.8), Kusumāvalīkāra (76⁶.13), *Lakṣmaṇatippaṇa* (70.48–49), Mādhava (1.25: Śrīmādhava; 2.1: Mādhavakāra's *Nidānasamgraha*; 10.43–51: Mādhavakāra's *Yogavyākhyā*; 27.1: Mādhavakāra's *Rugvinīscaya*; 61.9: Mādhava; 81.3: Mādhava), mahārāṣṭrakāḥ (61.175), maharṣivacana (4.23; 6.120–121), *Mahāvīdeha* (77.8–9), Medhāvin (5.120–121),¹⁶⁹ Munidāsa (10.23–28), Nāgārjuna (6.14; 15.15: *Nāgārjunavārttāmālā*; 61.148–152),¹⁷⁰ Naradanta (44.32; 57.71: naradantavyākhyāsampradāya), *Nidānasamgraha* (58.29–31 and 52cd),¹⁷¹ *Nighaṇṭu* (39.5–6), Nighaṇṭukāra (1.201), Nimi (61.13–14; 72.12; 75.27; 77.1 and 8–9), pākhaṇḍikāḥ (81.59),¹⁷² Pañjikākāra (59.26), paramācārya (5.120cd–121), Parāśara (1.40; 3.49–51 and 69), *Prājāpatya* (81.46), Punarvasu (4.15), *rasarāśayanavāda* (3.69), *ratnaparīkṣāśāstra* (22.13), Punarvasu (4.15), Rakṣita (69.23–27),¹⁷³ Ravigupta (10.29–42), *Rugvinīscaya* (1.2; 27.1; intr. to 54), śālākināḥ (79.3), *śālākya* (79.10), *śālākyavidāḥ* (78.3), *Samgraha* (82.25 and 27, several times),¹⁷⁴ *Samgrahakāra*(ka) (1.224–225; 30.32; 41.33; 44.46), Sātyaki (61.9), Śaunaka (82.27),¹⁷⁵ *sauśruto granthaḥ* (31.9–10), Soma (82.1–2 and 8–9), *Somatippaṇa* (80.1, 4, 14, 26–27; 81.3 and 18), *Somavyākhyā* (1.7), Śrīkaṇṭhapāṇḍita (73.15), Sudāntasena (8.6; 72.3), *sūdaśāstra* (18.18; 62.45), Suśruta (passim), *tantrāntara* (many times), *tantrāntarīyāḥ* (1.214ab; 5.117–119; 10.84–85; 79.1 and 3; 35.40–42; 81.43–44), *ṭikākārāḥ* (1.99cd; 10.29–42), *ṭikākṛt* (51.24–28), *ṭikākṛtaḥ* (9.21ab and 25), *tippanī* (23.34–42; 37.31–34), Udbhaṭa (1.49), *Upaskāra* (47.13), Vāgbhaṭa (1.25; 5.117–119; 6.19cd; 9.31; 41.54; 57.84; 58.65–66; 65.6cd; 70.1; 76⁶.4 and 9–10; 77.8–9; 81.79; 82.20–24, 25, 27), *vaidyāḥ* (3.9 and 60–61; 23.28; 76².1–2; 76⁴.1–3), *Vaidyaka* (81.17), *Vaidyakaśiddhānta* (81.3), *Vaidyaprasāraka* (1.128; 4.17–

18; 9.49–56; 11.28–29; 30.27–28; 37.59–61; 40.24–26; 51.22 and 107–110; 58.65–66; 61.170–171; 62.51–53), Vaikāraṇa (58.45cd),¹⁷⁶ Varṇasena (9.19), Videha (1.244 and 263; 4.17–18; 59.13–14 and 30; 61.5, 7, 26, 188; 76.11; 77.8–9; 78, 3, 4, prose between 10 and 11, 12, 19; 79.7), Viśvāmītra (5.111 and 112; 30.40–43; 33.2; 66.1), vṛddha (13.4), vṛddhāḥ (1.205; 81.46), *Vṛddhakāśyapa* (12.22–24), *Vṛddhasuśruta* (1.55; 5.64–67), *Vṛddhavāgbhaṭa* (71.3; 76⁶.14; prose between 78.1 and 2; 78.4 and 11), and vṛddhavidyāḥ (1.49, 89, 90, 91, 158, 205; 3.9 and 22; 10.43–51; 22.74–78; 25.30–33; 51.107–110; 71.19–20; 75.9).

The author of the *Kusumāvalī* consulted many manuscripts¹⁷⁷ and mentions repeatedly variant readings.¹⁷⁸

Important are the references to Vṛnda in the text of the commentary. Vṛnda is mentioned ad *Siddhayoga* 1.49, 54, 205, 232; intr. to chapter 2; 2.20; 3.22, 49–51, 60–61; 4.16; 5.19–21 and 113ab; 10.2–3; 11.14–17; 12.22–24 and 25–30; 4.16; 20.30; 22.7–10 and 67–71; 25.30–33; 27.1; 34.10 and 11–17; 39.5–6 and 29–33; 41.53; 51.24–28; 57.8cd–9; 58.29–31; 64.11–17; 65.18; 69.34. The majority of these remarks identify verses or parts of verses composed by Vṛnda and often called *tippana*, *tippanī* or *tippanikā*. Minor changes in the wording of verses borrowed from an earlier work are also indicated. The explanations of the commentator show that Vṛnda often chose to follow old medical traditions (vṛddhavidyavyavahāra), not hesitated in deviating from Caraka,¹⁷⁹ accepted teachings from works not mentioned by name,¹⁸⁰ or agreed with the views of Kārttika(kuṇḍa).¹⁸¹ Vṛnda's views are sometimes criticized in the *Kusumāvalī* as based on confusion¹⁸² or as being not attractive.¹⁸³ A few references to Vṛnda¹⁸⁴ may imply that he added explanations to the text of his treatise,¹⁸⁵ unless they allude to an earlier, but lost, commentary. An unidentified Vṛnda¹⁸⁶ *tippanakāra*, quoted by Āḍhamalla,¹⁸⁶ may also be a commentator on the *Siddhayoga*.

The *Kusumāvalī* is quoted in Gopāladāsa's *Cikitsāmrta*.¹⁸⁷ Nārāyaṇa refers in his revised version to the *Kusumāvalīkāra*.¹⁸⁸ Śivadāśasena repeatedly employs the term vṛnda¹⁸⁹ *tippanī* or *-tippanikā* when the *Vyākhyākusumāvalī* is meant.¹⁸⁹ Jivānandavidyāśāgāra's commentary on the *Rasendrasārasamgraha* contains a quotation from Śrīkaṇṭha¹⁹⁰ that cannot be but from the *Kusumāvalī*. The *Vyākhyākusumāvalīkāra* and Śrīkaṇṭha are quoted in Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.

Nārāyaṇadāsa and Nārāyaṇāntaraṅga are quoted in the comments on Govindase-na's *Paribhāṣāpradīpa*.

Chapter 7 Cakrapāṇidatta

Cakrapāṇi(datta)¹ was the author of the (1) *Cikitsāsamgraha*, (2) *Dravyaguṇasamgraha*, (3) *Vyagradaridrāsubhaṃkara*, (4) a commentary on the *Carakasamhitā*, called *Āyurvedadīpikā*,² and (5) a commentary on the *Suśrutasaṃhitā*, called *Bhānumatī*.³ Other works, sometimes attributed to him, are the *Gūḍhavākyabodhaka*,⁴ *Muktāvalī*,⁵ *Sarvasārasamgraha*,⁶ and *Vyākaraṇatattvacandrikā*.⁷

1 The *Cikitsāsamgraha*

The *Cikitsāsamgraha*,⁸ also called *Cakradatta* and *Cakra(datta)samgraha*, is a therapeutic treatise of the same type as Vṛnda's *Siddhayoga*.⁹

Contents

The work consists of about 4,800 verses and some prose,¹⁰ arranged in seventy-nine chapters. The maṅgalācaraṇa is in praise of the Trimūrti. In the second verse the author, who calls himself Cakrapāṇi, declares to have made a collection of various famous formulae, accompanied by explanations of obscure meanings (gūḍhavākyabodhakavākya). After a verse on the basic attitude to be adopted by a therapist, Cakrapāṇi begins at once expounding the rules concerning the treatment of fevers. Verses on nidāna are absent.¹¹

Chapters one to sixty-five are arranged in conformity with the scheme of the *Mādhavanidāna*, except for a number of minor deviations. These changes consist of separate chapters on jvarātisāra, śūla and pariṇāmaśūla, udāvarta and ānāha, udara and plīhayakṛt (swelling of spleen and liver);¹² the *Cakradatta* has one chapter only on all kinds of vṛṇa, called vṛṇaśoṭha; visarpa and visphoṭa are dealt with in one chapter; three chapters are devoted to women's diseases, namely asṛgdara, yonivyāpad and strīroga.¹³ The disease yonikanda, described for the first time in a separate chapter of the *Mādhavanidāna*, is mentioned in the chapter on yonivyāpad under the name of bhagaphala.¹⁴

Nīścalakara, the author of a commentary on the *Cakradatta*, does not acknowledge a separate chapter on dāha, as the *Mādhavanidāna* and *Siddhayoga* have.¹⁵

The order of some chapters of the *Cakradatta* differs from that found in *Mādhavanidāna* and *Siddhayoga*. The chapter on bhagna is placed between those on śūkadōṣa and kuṣṭha, whereas the *Mādhavanidāna* and *Siddhayoga* put it between those on vṛṇa and nāḍivṛṇa.¹⁶

The order of the kṣudrarogas disagrees with their arrangement in the *Mādhavanidā-*

na.

The chapters on treatment of the various diseases are followed by eleven chapters, concerned respectively with rasāyana, vṛṣya (= vājīkaraṇa), sneha, sveda, vamaṇa, vinecana, anuvāsana, nirūha, nasya, dhūma, and kavala. The *Siddhayoga* has a similar series of chapters. The last three chapters of Cakrapāṇi's treatise are devoted to preparations used in the treatment of eye diseases (āścyotana, añjana, tarpaṇa, puṭapāka), bloodletting, and the preservation of health (svastha). Unlike the *Siddhayoga*, the *Cakradatta* has no chapters on arisṭas and on miscellaneous subjects. The work ends with two verses containing information on the author and his treatise.

The main source for the composition of the *Cikitsāsamgraha* was obviously Vṛnda's *Siddhayoga*, which strikes the eye when both works are compared. Indications in the text itself concerning its sources are small in number. Caraka and Suśruta are referred to on a number of occasions.¹⁷ The latter part of the chapter on children's diseases consists of a reproduction of Rāvaṇa's *Kumāratantra*,¹⁸ a large part of the chapter on rasāyana (34–125) is a paraphrase of Nāgārjuna's *Lohaśāstra*; a nāgārjunayoga is found in the chapter on haemorrhoids (arśas 61–70); the śilājatuvidhāna, found in the same chapter (152–158), was borrowed from Caraka,²⁰ as indicated in the text itself; the formula of śivaguṭikā (rasāyana 172–195), taught by Śiva to Gaṇapati, is said to be from the *Śaivasiddhānta*.²²

Noteworthy among the authorities to whom recipes are ascribed are Agastya (kāsa 61–66),²³ the Āśvins,²⁴ a Bodhisattva (arśas 105–106),²⁵ Jīvaka (ślīpada 24–30),²⁶ Kaca (mūtrāghāta 10),²⁷ and Kṛṣṇātreya (karṇaroga 18–22).²⁸

Numerous references to works and authors exploited by Cakrapāṇi in the composition of his *Samgraha* occur in the commentaries of Nīścalakara and Śivadāsasena.

The former's *Ratnaprabhā* is a very rich mine of information on the subject.²⁹ It indicates as sources utilized by Cakrapāṇi: Agniveśa, Amitaprabha, *Amṛtamālā*, *Aśvavaidyaka*, *Aśvinikumārasaṃhitā*, Ātreya, *Āyurvedasāra*, Bhadravarman, Bhālu-ki, Bhela, *Bhīṣagmuṣṭi*, Bhoja, Bindusāra, *Bṛhattantrapradīpa*, Cakṣuṣyeṇa, Candrāṭa, Caraka, *Carakottaratantra*, *Cikitsākalikā*, *Cikitsātiśaya*, Dṛḍhabala, *Gandhaśāstra*, *Haramekhālā*, Hārīta, Jatūkarṇa, Kālapāda, Kharanāda, Kṛṣṇātreya, Kṣārapāṇi, *Lohaśāstra*, Mādhavakara, Nāgārjuna, Nalanṛpati's *Sūdasāstra*, Nāvanītaka, Parāśara, Prthvīsimha, Puṣkalāvata, *Ratnamālā*, Ravigupta, Śālihotra, Śaunaka, *Siddhasāra*, *Siddhayoga*, *Śivasiddhānta*, *Sūdasāstra*, Suśruta,³⁰ *Svalpavāgbhāta*, *tantrāntara*, Tīsaṭa, Ugrasena, Vāgbhāta, *Vṛddhasuśruta*, *Vṛddhavāgbhāta*, *Vṛddhavideha*, *Vyagradaridrāsubhaṃkara*, *Yogapañcāśikā*, *Yogaśata*, and *Yogayukti*.

Some sources mentioned by Śivadāsasena are: Agniveśa (jvara 64), *Āyurvedasāra* (jvara 105), Bhela (jvara 182–183), Candrāṭa (vṛṇaśoṭha 52; vṛṣya 15–24), Caraka (often), Hārīta (jvara 71; gulma 43–44), Kṛṣṇātreya (chardi 17–18), Suśruta (often), and Vāgbhāta (often).

Cakrapāṇi's relationship to Vṛnda is to some extent clarified by Nīścala, who repeatedly records stanzas of Vṛnda changed by Cakrapāṇi,³¹ verses added to those by Vṛnda, and formulae of the *Cikitsāsamgraha* which are absent from the *Siddhayoga*.³² Many verses which Cakra simply took from the *Siddhayoga* are, however, not indicated by Nīścala as deriving from this source.³³

Śivadāsasena records a number of cases where Cakra disagrees with Vṛnda.³⁴

Cakra's respect for Vṛnda is revealed by the imprecation at the end of the *Cikitsā-saṃgraha*: "The curse uttered by those who know the *Bhaṭṭatraya*³⁵ and the three Vedas may at once come down on the head of him who includes formulae, which are not written down in the *Siddhayoga*, in this treatise, or who removes a single one from it".

The success of Cakrapāṇi's *Samgraha*, which ousted Vṛnda's *Siddhayoga*, may be due to its inclusion of a rather large number of new formulae, containing inorganic substances such as mercury, sulphur, metals, and compounds of these. The verses with the formula of one of these medicines were composed by Cakrapāṇi himself, as indicated in the text.³⁶ Some prose passages from the *Suśrutasaṃhitā*, containing lists of plants and other medicinal substances belonging to a particular group (*gaṇa*), were versified by Cakrapāṇi, as attested by Niścala.³⁷ The commentaries of Niścalakara and Śivadāsasena on the *Cakradatta* contain additional information on verses composed by the author or deliberately changed.³⁸

Special features³⁹

Among the special features of Cakra's *saṃgraha* the medicines containing mercury or mercurial compounds should be noted first. These are chiefly found at: *grahaṇī* 85–90 (*rasaparpatikā*)⁴⁰ and 91–97 (*tāmrayoga*); *arśas* 177 (*rasagutikā*); *agnimāndya* 28–29 (*pāṇiyabhaktaḡutikā*); *krimi* 10 (= *Siddhayoga* 7.13); *yakṣman* 30–34 (*rasendragutikā*); *pariṇāmasūla* 51–53 (*rasamaṇḡūra*); *plihayakṛt* 41–47 (*lokanātharasa*); *amlapitta* 38–50 (*kṣudhāvatī* *gutikā*); *masūrikā* 7.⁴¹

Medicines containing metals, especially iron, or their compounds, are found at: *arśas* 161–168 (*agnimukhalauha*) and 169–176 (*bhallātakalauha*);⁴² *pāṇḍuroga* 11–12 (*navāyasaloḥa*);⁴³ 13–19 (*yogarāja*); 34–35 (*viḡaṅgādyalauha*); 36–41 (*tryū-ṣaṇādyamaṇḡūra*);⁴⁴ 42–44 (*punarnavāmaṇḡūra*);⁴⁵ 45–48 (*maṇḡūravajravatāka*);⁴⁶ *raktapitta* 82–97 (*khaṇḡakādyalauha*);⁴⁷ *yakṣman* 28–29 (*vindhyavāsiyoga*); *sūla* 50–57 (*dhātṛilauha*); *pariṇāmasūla* 13 (*triphalālauha* and *-maṇḡūra*);⁴⁸ 14 (*pippalyādilauha*);⁴⁹ 15 (*pathyādilauha*);⁵⁰ 16–19 (*sāmudrādyacūrṇa*);⁵¹ 21–22 (*saptāmṛtalauha*); 25 (*kolādimāṇḡūra*);⁵² 26–28 (*bhīmavātakamaṇḡūra*);⁵³ 29 (*kṣīramaṇḡūra*);⁵⁴ 30–31 (*cavikādimāṇḡūra*); 32 (*maṇḡūra* and *lauhaprayoga*); 33–35 (*śatāvarīmaṇḡūra*);⁵⁵ 36–41 (*tārāmaṇḡūraguḡa*);⁵⁶ 42–45 (*rāmamaṇḡūra*); 46–50 (*bṛhacchatāvarīmaṇḡūra*); 51–53 (*rasamaṇḡūra*); 54 (*triphalālauha*);⁵⁷ 55–56 (*lauhagūṭikā*); 57–62 (*dhātṛilauha*);⁵⁸ 63–68 (*lauhāmṛta*); *sṭhauḡya* 6–9 (*viḡaṅgādyalauha*) and 19–29 (*lauharasāyana*); *kuṣṭha* 152 (*sindūrādyataila*)⁵⁹ and 153–156 (*mahāsindūrādyataila*);⁶⁰ *amlapitta* 38–50 (*kṣudhāvatī* *gutikā*); *netraroga* 125–129 (*nāgārjunavartī*);⁶¹ *yonivyāpad* 30; *rasāyana* 129–135 (*ṣaḡaṅgātāmrayoga*) and 136–151 (*saptāṅgātāmrayoga*).

Alchemical processes are described: *amlapitta* 27–29 (*abhrasūddhi*); 30–32 (*lauhaśuddhi*); 33–34 (*maṇḡūrasūddhi*); 35 (*rasasūddhi*); 36–37 (*gandhakaśuddhi*); *rasāyana* 34–50, 51–62 (*lauhamāraṇavidhi*); 63–64 (*bhānupāka*); 65–66 (*sṭhālīpāka*); 67–75 (*putapāka*); 76–91 (*pākavidhi*); 92–97 (*abhrakavidhi*); 98–122 (*bhakṣaṇavidhi*); 123–125.

A noteworthy name of a disease is *ahiṇḡikā* (*bālaroga* 7);⁶² some recipes are given for its treatment (*bālaroga* 8–10).⁶⁴

Cakrapāṇi added a fair number of single or compound medicines to those collected by Vṛnda.⁶⁵ Some of these are:⁶⁶ the fresh juice from the leaves of *śephālī* in fevers (*jvara* 214), *anikoṭhavatāka* in diarrhoea (*atisāra* 58–60), *nāgārjunayoga* (*arśas* 61–70) and *vijayacūrṇa* (*arśas* 71–77) in haemorrhoids, powdered lotus seeds (*padmabījacūrṇa*; *kāsa* 16) in cough due to pitta, *vyāghrīharitakī* (*kāsa* 67–70) in coughs, *mayūrapucṣhādileha* (*hikkāśvāsa* 17) in hiccup and shortness of breath, *kalahaṇṣa* (*arocaka* 18–19) in anorexia, *aśvatthavalkalapāṇīya* (*chardi* 25) in vomiting, *dhustūramūlasiddhapāyasa* (*unmāda* 6) in insanity, *śephālīkvātha* (*vātavyādhi* 43) in *grḡdhrasī*, *siṃhanādagugguḡa* (*āmavāta* 39–47) and *rasonasurā* (*āmavāta* 71–73) in *āmavāta*, *rudrajaṭālepa* (*vṛddhi* 20), *rūpikālepa* (*vṛddhi* 21), *hastikarṇapalāśalepa* (*galagaṇḡa* 2), *karpāsamūlapūpikā* in *apacī* (*galagaṇḡa* 27), *bhūnāgacūrṇalepa* (*bhagandara* 10) in anal fistulas, etc. Some more new prescriptions are: *irimedādyataila* (*mukhagataroga* 19–24), *bakulādyataila* (*mukhagataroga* 28–29), and *citrakaharītakī* (*nāsāroga* 31–33).⁶⁷

Cakrapāṇi's chapter on *stṛīroga*, longer than the chapter on the same subject in Vṛnda's *Siddhayoga*, adds recipes suitable to making flabby breasts firm (*stṛīroga* 62–66), tightening the vagina (67), and promoting the husband's interest in his wife (68–69).

To be noticed too is the increased use of substances of animal origin and of prescriptions with a Tantric flavour.⁶⁸ Mantras are repeatedly employed. Cakrapāṇi describes two yantras, the *ubhayatṛiṃśaka*, already known to Vṛnda, and the *ubhayapaṇicadaśaka* (*stṛīroga* 25–27), both thought to assure a pregnant woman of an easy delivery.

Noteworthy vegetable substances mentioned in the *Cakradatta* are:⁶⁹ *āhā* (*vātavyādhi* 72),⁷⁰ *ahindra* (*rājayakṣman* 7),⁷¹ *aindrī* (*galagaṇḡa* 21),⁷² *amloṭa* (*jvara* 223),⁷³ *arunataṇḡulīyaka* (*masūrikā* 23 and 24),⁷⁴ *aśanamallikā* (*nāsāroga* 28),⁷⁵ *asitavetra* (*visarpa* 21),⁷⁶ *avākpūṣpī* (*arśas* 129),⁷⁷ *bṛhatpattra* (*amlapitta* 31),⁷⁸ *cakrāhvaya* (*kuṣṭha* 32),⁷⁹ *carmakārāluka* (*vṛṣya* 25),⁸⁰ *celaka* (*vātavyādhi* 300),⁸¹ *cāmpeya* (*vātavyādhi* 230),⁸² *cukṛikā* (*tṛṣṇā* 22),⁸³ *daṇḡotpala* and *daṇḡotpalā* (*arśas* 169; *galagaṇḡa* 33; *amlapitta* 43),⁸⁴ *devapūṣpī* (*vātavyādhi* 268),⁸⁵ *dvika* (*mukharoga*, *mukhagataroga* 30),⁸⁶ *ekaiṣikā* (*vṛṇaśoṭha* 8),⁸⁷ *elaka* or *elakā* (*ślīpada* 31),⁸⁸ *gajacirbhiṭa* (*gulma* 40),⁸⁹ *gandhapattraka* (*vātavyādhi* 300),⁹⁰ *gaṅgāpālāṅka* (*arśas* 177),⁹¹ *gaurā* (*vṛṇaśoṭha* 78),⁹² *godhāvatī* (*mūtrāghāta* 11; *ślīpada* 15),⁹³ *guḡdapuṣpa* (*agnimāndya* 89),⁹⁴ *hastikarṇa* or *hastikarṇapalāśa* (*galagaṇḡa* 2; *rasāyana* 19), also called *karikarṇacchada* (*rasāyana* 55),⁹⁵ *indrāśana* (*kuṣṭha* 64),⁹⁶ *irima* (*mukharoga*, *mukhagataroga* 25),⁹⁷ *jalakarṇā* (*rājayakṣman* 31),⁹⁸ *jalakumbhīka* (*galagaṇḡa* 6),⁹⁹ *jīṅgikā* (*prameha* 8),¹⁰⁰ *jīrākhyā* (*raktapitta* 94),¹⁰¹ *jjyotsnikā* (*arśas* 6 and 113),¹⁰² *kālā* (*galagaṇḡa* 43; *vṛṇaśoṭha* 8 and 101; *nāḡivṛṇa* 5),¹⁰³ *kālamāriṣa* (*amlapitta* 39),¹⁰⁴ *kālāvakaraka* (*amlapitta* 43),¹⁰⁵ *kalāyavidālī* (*vṛṇaśoṭha* 67),¹⁰⁶ *kañcaṭa* (*atisāra* 38; *grahaṇī*),¹⁰⁷ *kaṅgunikā* (*nāḡivṛṇa* 9),¹⁰⁸ *kāntakrāmaka* (*vṛṇaśoṭha* 53),¹⁰⁹ *kaṇṭā-kumbhāḡu* (*masūrikā* 5),¹¹⁰ *kapotavaktraka* (*aśmarī* 3 and 26),¹¹¹ *karabhavāruṇī* (*vṛṣya* 57),¹¹² *karṇākhya* (*jvara* 209),¹¹³ *karṇamoṭa* (*vṛṇaśoṭha* 40),¹¹⁴ *kaṣikā* (*pariṇāmasūla* 63),¹¹⁵ *keśarāja* (*pariṇāmasūla* 51; *amlapitta* 39 and 43; *bālaroga* 15; *rasāyana* 55 and 66),¹¹⁶ *kaṭumbharā* (*vātavyādhi* 230),¹¹⁷ *khadirī* (*mūtrāghāta* 12),¹¹⁸ *khaṇḡakarma* (*amlapitta* 27 and 43),¹¹⁹ *kolā* (*pariṇāmasūla* 25),¹²⁰ *kṛṣṇavetra* (*kuṣṭha* 61 and 154),¹²¹ *kūḡakarāṇī* (*viṣa* 25),¹²² *kukkurameṇicukā* (*stṛīroga* 58),¹²³ *kuḡikā* (*viṣa* 6),¹²⁴

kuṭhāra(ka) (vraṇaśoṭha 49, 90, 91),¹²⁵ lavalikā (mukharoga, mukhagataroga 30),¹²⁶ lomaśa (kuṣṭha 9),¹²⁷ maghī (masūrikā 5),¹²⁸ madhurī (vātavyādhi 254 and 268),¹²⁹ mahārāṣṭrī (vraṇaśoṭha 47),¹³⁰ nakhī (vātavyādhi 269),¹³¹ naravṛkṣa (kṣudraroga 123),¹³² nirdahanī (śūla 45),¹³³ palāśā (hṛdroga 28),¹³⁴ pamarā (vātavyādhi 269),¹³⁵ peṭī (bālaroga 32),¹³⁶ pratyāṅgirā (viṣa 2),¹³⁷ rudrajaṭā (mūtrāghāta 12; vṛddhi 20),¹³⁸ śālīṇca (amlapitta 28 and 30; rasāyana 56),¹³⁹ śārada (prameha 2),¹⁴⁰ sikaṭī (masūrikā 5),¹⁴¹ śītalī (asmarī 37),¹⁴² sphuṭaka (bālaroga 13),¹⁴³ srāviṇī (vātarakta 75),¹⁴⁴ śṛgālakaṇṭaka (masūrikā 8),¹⁴⁵ śṛgālakolī (vraṇaśoṭha 58),¹⁴⁶ śvetabalā (yonivyāpad 32),¹⁴⁷ śvetajayantī (kuṣṭha 74),¹⁴⁸ śvetavātyāla (pariṇāmaśūla 42; amlapitta 33),¹⁴⁹ taila (rājayakṣman 88),¹⁵⁰ tālamastaka (asṛgdara 23; vṛṣya 36 and 40),¹⁵¹ tṛṇaka (kuṣṭha 24 and 132),¹⁵² tvakpattra (vireka 3),¹⁵³ uṣṭrakāṇṭaka (masūrikā 7),¹⁵⁴ and vaśīra (asmarī 2-4),¹⁵⁵ An unidentified animal is the karaṭavī (vṛddhi 20).¹⁵⁶

Musk (kastūrī) is a substance that begins to appear more frequently in Sanskrit literature since the Gupta age.¹⁵⁷ The *Cakradatta* prescribes kastūrī (vātavyādhi 230) and describes the characteristics of purified musk (mṛgottamā)¹⁵⁸ (vātavyādhi 293).¹⁵⁹

Another fragrant substance of animal origin mentioned in the *Cakradatta* as pūti (vātavyādhi 289) and śālīja (vātavyādhi 297) is civet.¹⁶⁰

2 The *Dravyaguṇasaṃgraha*

The *Dravyaguṇasaṃgraha*¹⁶¹ is concerned with the medicinal properties of solid and liquid articles of food. On this subject it represents the earliest special treatise that has been preserved.

Contents

This work,¹⁶² based on treatises of predecessors,¹⁶³ consists of 592 verses,¹⁶⁴ divided into thirteen sections (varga):¹⁶⁵ (1) dhānyavarga; after verses on the tastes, vīrya and vipāka, Cakrapāṇi describes the properties of grain, pulse, sesamum, and related articles of diet; (2) māṃsādivarga, on the flesh of a long series of animals and the eggs of some of these; (3) śākavarga, on vegetables; (4) lavaṇādivarga, on types of salt and related substances, spices and condiments; (5) phalavarga, on fruits; (6) pāṇīyavarga, on various types of water and the watery juice from the coconut, young kramuka, and tāla; rules for the use of cold or warm water in diverse disorders, rules for the use of boiled water; (7) kṣīravarga, on milk and dairy produce; (8) tailavarga, on oils and some other fatty substances; (9) aikṣavādivarga, on products of the sugarcane and types of honey; (10) madyādivarga, on alcoholic drinks and other fermented liquids, on types of urine; (11) kṛtānavarga, on prepared foods of a liquid and semi-liquid nature; (12) bhakṣyavarga, on prepared foods of a solid nature; (13) āhāravidhi, rules for serving and taking food, description of the digestive processes; anupānavidhi, rules for the use of anupānas, i.e., drinks to be taken during or after meals; guṇakarmāṇi, the effects of the qualities of foods and drinks on the human organism; svasthavṛtti, rules about the maintenance of health.

The chief sources of the *Dravyaguṇa* are the *Carakasamhitā* and *Suśrutasaṃhitā*.¹⁶⁶ Cakrapāṇi probably used other works as well and may have composed some stanzas

himself.¹⁶⁷

Special features¹⁶⁸

Vīrya is said to be of two, vipāka of three types (dhānya 8-10).¹⁶⁹ The pulse, usually called āḍhakī, is described under the name of tuvarī (dhānya 30c).¹⁷⁰ Cakrapāṇi uses the term vātasādhāraṇa (māṃsādi 1.4) for a substance that neither excites nor pacifies vāta.¹⁷¹ Noteworthy is a long series of fishes in the māṃsādivarga,¹⁷² which indicates that Cakrapāṇi was a resident of Bengal, where much fish is consumed.¹⁷³ Vegetables are said to be of six types (śāka 1.2), namely leaves, flowers, fruits, stalks, tubers and mushrooms; this classification was later adopted by Bhāvamiśra. Some vegetables, well known in Bengal and described in Cakrapāṇi's *Dravyaguṇa* are bhūkanda (śāka 2.9),¹⁷⁴ grīṣmasundaraka (śāka 1.28),¹⁷⁵ hilamocī (śāka 1.12),¹⁷⁶ kaccī (śāka 2.12),¹⁷⁷ kañcaṭa (śāka 1.23),¹⁷⁸ māṇaka (śāka 2.10),¹⁷⁹ nāḍica (śāka 1.29),¹⁸⁰ and the stalks of alābu (śāka 1.48) and kuṣmāṇḍa (śāka 1.43). Remarkable items among the fruits are anupākin (phalavarga 31)¹⁸¹ and madhukukkuṭī (phalavarga 25).¹⁸² A type of sugar not mentioned in earlier texts is tamarāja (aikṣavādivarga 12).¹⁸³

3 The *Vyagradaridraśubhaṃkara*

The *Vyagradaridraśubhaṃkara*¹⁸⁴ is mentioned several times in Niścalakara's *Ratnaprabhā*; Gopālādāsa quotes it as the *Vyagradīnaśubhaṃkara* in his *Cikitsāmṛta*.¹⁸⁵

Niścala refers to the work as *Śubha*,¹⁸⁶ *Śubhaṃkara*,¹⁸⁷ and *Vyagradaridraśubhaṃkara*.¹⁸⁸ Niścala's quotations and remarks show that it was a treatise in verse, arranged in chapters (prakaraṇa) dealing with a particular type of preparation.¹⁸⁹ The *Vyagradaridraśubhaṃkara* was written before the *Cikitsāsaṃgraha*, which contains verses borrowed from it.¹⁹⁰ Some other stanzas of the *Cakradatta*, composed by Cakrapāṇi, are adaptations of verses found in his earlier work.¹⁹¹ The *Vyagradaridraśubhaṃkara* is probably referred to, without mentioning its name, in Niścala's remarks ad śoṭha 6.¹⁹²

Quotations from Cakrapāṇidatta and his works

Cakra is quoted by Āḍhamalla, in Ambikādattaśāstrin's commentary on the *Rasendrasārasaṃgraha*, Āśubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa*, the *Āyurvedābhisāra* (112), the comments on Govindasena's *Paribhāṣāpradīpa*, Gopālādāsa's *Cikitsāmṛta*, Nāganātha's *Nidānapradīpa*, Narasiṃha's commentary on the *Mādhavanidāna*, Niścalakara's *Ratnaprabhā* (very often), Nityanātha's *Rasaratnākara*,¹⁹³ Śivadāsa's commentaries (on the Sūtrasthāna of the *Carakasamhitā*, Uttaraśthāna of the *Aṣṭāṅgahṛdayasaṃhitā*, Cakrapāṇi's *Cikitsāsaṃgraha* and *Dravyaguṇa*),¹⁹⁴ Śivadatta's auto-commentary on his *Śivakośa*,¹⁹⁵ Śrīkaṇṭhadatta's part of the *Madhukośa*,¹⁹⁶ and his *Kusumāvalī*,¹⁹⁷ Vācaspati's *Ātanakadarpaṇa*,¹⁹⁸ and Vijayarakṣita's part of the *Madhukośa*.¹⁹⁹

Cakrapāṇi is cited in Āśubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa* and Niścalakara's *Ratnaprabhā*. He is sometimes called Cakradatta by Niścala. Guṇarājśarmamiśra's *Viśikhānupraveśavijñāna* contains a quotation from

Cakrapāṇi that has been taken from the *Āyurvedadīpikā* (ad Ca.Si.9.50). Cakrapāṇidatta is quoted in the comments on Govindasena's *Paribhāṣāpradīpa*, Nīścala's *Ratnaprabhā* and Sukhānanda's commentary on the *Vaidyājīvana* of Lolimbarāja.

Authors and works quoting from or referring to the Cakradatta are: Āḍhamalla, the *Amṛtasāgara*, Āśubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa*, the *Āyurvedābhisāra* (179) and its commentary (ad 183), the *Āyurvedīya Khani-javijñāna*, *Bhāvaprakāśa*,²⁰⁰ *Bheṣajasaṃhitā*, *Bṛhannighaṇṭurātākara*, *Devasiṃha Viṭṭhal's Bṛhadāsavāriṣṭasaṃgraha*, the comments on Govindasena's *Paribhāṣāpradīpa*, *Gulrajāśarmamiśra's Viśikhānupraveśavijñāna*, *Hariprapanna's Rasayogasāgara*, *Jīvanandavidyāsāgara's* commentary on the *Rasendrasārasaṃgraha*, the *Kāmaratna*, *Rasoddhātatantra*, *Ratnasāgara*, *Priyavrat Śarmā's* auto-commentary on the *Āyurvedadarśana*, *Śivādāsasena's* commentary on the *Uttarasthāna* of the *Aṣṭāṅghṛdaya*,²⁰¹ *Śivamiśra's Vaidyaśāstraśivānubhava*, *Trimalla's Yogatarāṅgiṇī*,²⁰² *Vāsudeva's Vāsudevānubhava*, *Vinodalāla Sena's Āyurvedavijñāna*, and the *Yogarātākara*.²⁰³ It is one of the sources of Āryadāsa Kumārasīṃha's *Kvāthamaṇimālā* and the *Rasendrasambhava*.

The Cakradatta is quoted as *Cakrasaṃgraha* in the commentaries of Nīścalakara and Śivādāsasena on the work. Nīścala calls it occasionally Cakra's *Svasaṃgraha* and *Yogasamgraha*. It is also quoted as *Samgraha* by Nīścala and Śivādāsasena, who call its author *Samgrahakāra* or -kṛt. Hārāṇacandra (ad Su.Sū.46.294–297) quotes from it as *Cakrapāṇisamgraha*.²⁰⁴

Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya* quotes Cakra, Cakrapāṇi, the Cakradatta, *Cakrapāṇisamgraha* and *Cakrasaṃgraha*. Somadevaśarman's commentary on the *Āyurvedaprakāśa* refers to Cakrapāṇi's *Cikitsāsaṃgraha*.

The comments on Govindasena's *Paribhāṣāpradīpa* quote it as Cakradatta's *Svasaṃgraha* and the *Cakrapāṇikṛtasamgraha*. Āśubodha Senagupta's commentary on Govindasena's treatise quotes it as *Cakrasaṃgraha*.

The Cakradatta was one of the sources of the *Ma'din al-Šīfā*.

The *Dravyaguṇasaṃgraha* is quoted in Gopāla's *Dravyaguṇa* and may have been one of the sources of Ṭoḍara's *Āyurvedasaukhyā*.

The author

Cakrapāṇi has provided us with information concerning himself at the beginning and end of his commentary on the *Carakasamhitā* and at the end of the *Cikitsāsaṃgraha*.

Cakrapāṇi was the son of Nārāyaṇa, who was the superintendent of the kitchen (*rasavatyadhikārin*) and a minister (*pātra*) of a king of Bengal (Gauḍa);²⁰⁵ his elder brother, called Bhānu,²⁰⁶ was a court physician (*antarāṅga*).²⁰⁷ Cakrapāṇi belonged to the *Lodhravālī* branch²⁰⁸ of the Datta lineage,²⁰⁹ a branch that did not become extinct and is still represented among the inhabitants of Shillong in Meghālaya.²¹⁰

Cakrapāṇi's teacher was Naradatta and his commentary on the *Carakasamhitā* was written in agreement with Naradatta's interpretation of this text.²¹¹

Śivādāsasena²¹² adds to this information that Cakrapāṇi's father, Nārāyaṇa, was

a minister (*mantrin*) of king Nayapāla of Bengal (A.D. 1038–1055).²¹³ Some authors claim that Cakrapāṇi was born in the Vīrabhūma (Bīrbhūm) district of Bengal,²¹⁴ in a place called Mayūragrāma.²¹⁵

The introductory verses of the *Āyurvedadīpikā* and *Cikitsāsaṃgraha*, which are identical and dedicated to the Trimūrti, as well as the first verse of the *Dravyaguṇa*, dedicated to Śiva, show that the author of these works was a Hindu by faith.²¹⁶

Date

The fact that Cakrapāṇi's father, Nārāyaṇa, was in the service of king Nayapāla (1038–1055), establishes that Cakrapāṇi must have written his works in about the third quarter of the eleventh century.²¹⁷

Commentaries

An elaborate commentary on Cakrapāṇidatta's *Cikitsāsaṃgraha* was written by Nīścalakara. A later commentary by Śivādāsasena²¹⁸ is largely based on Nīścalakara's work.

Nīścalakara

Nīścalakara is the author of the very valuable *Ratnaprabhā*.²¹⁹

The author declares in the introductory verses that he gave to his work the title *Ratnaprabhā* because of its objective, namely to restore the brilliance of the *Cakrasaṃgraha* (i.e., the *Cikitsāsaṃgraha*), a gem the glow of which had dimmed on account of misunderstandings after the passing away of the āyurvedaguru Vijayarākṣita. He adds that he intends to attain his object by consulting various treatises and reflecting (*gharṣaṇa*) on the sayings of his teacher.

The *Ratnaprabhā* is a mine of information, abounding in critical considerations on the contents of the Cakradatta and quotations from numerous works, many of which are lost now.²²⁰ Nīścala does not limit himself to the clarification of Cakra's text, but expounds his own ideas too. This may be the reason that his commentary is called a *tātparyatīkā*.²²¹ He does not blindly adhere to the teachings of earlier authorities, not even to those of his guru, and records interpretations not accepted by the latter or is even slightly critical of him.

Cakrapāṇidatta is an admired authority, profusely quoted; laudatory epithets are applied to him: *carakacaturānana*, *bahuśrutaparīśrutasuśrutasaḥsraṇayana*, *sakalavaidya(kula)maulimālāmāṇikyā*, *mārjitacarāṇanakhamaṇi*;²²² he is referred to as *prāmāṇikāgrāṇi*,²²³ because of his refusal to acknowledge uncritically what is generally accepted (*na prasiddhim ādriyate*) and his habit of carefully examining whether or not a particular opinion has a rational basis (*yukta*, *yuktisiddha*).²²⁴ Nīścala censures colleagues who blindly follow customary interpretations,²²⁵ Cakrapāṇidatta²²⁶ and Vṛnda²²⁷ not excepted. He assures us that he is not even convinced by opinions based on reasoning; practical results (*vyavahārasiddha*) should be regarded as the ultimate test of a given practice.²²⁸

Niścāla's commentary gives evidence of the value he attached to establishing a correct text of the *Cakradatta*. He compared its readings with those of the sources and of other treatises,²²⁹ recording variants²³⁰ and errors.²³¹ Criteria applied in determining the appropriateness of a reading are its conformity with the text of other treatises,²³² its acceptance by earlier authorities,²³³ and its value for practice.²³⁴ Reaching a decision was sometimes fraught with difficulties or impossible. Consequently, Niścāla acknowledges in such cases the validity of two or more divergent readings²³⁵ or refrains from judgment.²³⁶

In general, Niścāla tries to solve controversies he discovers when consulting a number of authorities, but, not always feeling able to achieve this aim, he tends to accept two or more conflicting views together with the arguments adduced in support of them.²³⁷

Niścāla's experience as a practising physician emerges from remarks about formulations he prescribed to his patients and found to be effective.²³⁸ Well-known and regularly used recipes are indicated as such.²³⁹

A singular feature of the *Ratnaprabhā* is the occurrence of the names of some of Niścāla's patients. Persons who turned to him for help when suffering from some disorder were the paṇḍit Dhyānakīrti,²⁴⁰ Lokeśvara, who was in charge of the Tantric rituals (mahātāntrādhikṛta), the bhikṣu Śāntarakṣita,²⁴¹ and Yatapālita, who held an important position in the royal kitchen (bhojanavīryādhikṛta).²⁴²

The exact procedures in the preparation of compound medicines, the amounts of the ingredients, etc., are very often discussed in detail. The practices prevalent in Niścāla's time and country are described as vyavahāra²⁴³ or pracāra.²⁴⁴ Actual practice did not always conform to the instructions of the authoritative textbooks.²⁴⁵ Agreement with habitual practices is expressed in various ways,²⁴⁶ as is disagreement.²⁴⁷

Traditional views are those attributed to the vṛddhāḥ²⁴⁸ or vṛddhavaidyāḥ,²⁴⁹ and their teachings, the vṛddhavaidyopadeśa²⁵⁰ or vṛddhavaidyavyavahāra.²⁵¹ Niścāla is prone to accept this tradition, although, occasionally, he rejects it.²⁵²

A number of subjects relevant to medical theory and practice are elaborately discussed; examples are some types of parikṣā,²⁵³ the general treatment of fever,²⁵⁴ the treatment of irregular fevers,²⁵⁵ weights and measures,²⁵⁶ and technical terms.²⁵⁷

The identity of medicinal substances is a subject which is given much attention to. Niścāla not only deals with those occurring in the text of the *Cakradatta*,²⁵⁸ but also with those found in the treatises he quotes. Some noteworthy plant names of these sources are: ²⁵⁹ alavaṇā, ²⁶⁰ amogha, ²⁶¹ arka, ²⁶² bāṇā, ²⁶³ bhūnīlī, ²⁶⁴ devatākusuma, ²⁶⁵ guccha, ²⁶⁶ jalagaṇḍaja, ²⁶⁷ jāmātā, ²⁶⁸ kañcukī, ²⁶⁹ kandakarṇa, ²⁷⁰ kañṭī, ²⁷¹ kāṣṭhapūga, ²⁷² kulī, ²⁷³ kuliśa, ²⁷⁴ laguru, ²⁷⁵ modayantī, ²⁷⁶ mūlakapaṇī, ²⁷⁷ odanapākī, ²⁷⁸ pāśī, ²⁷⁹ phalī, ²⁸⁰ raṇḍākhyaṭāla, ²⁸¹ ruhā, ²⁸² vānīra, ²⁸³ vanya, ²⁸⁴ veṇaṇa, ²⁸⁵ vinayā, ²⁸⁶ viśāṇa, ²⁸⁷ vṛkī.²⁸⁸

Local names of disorders, plants, dishes, etc., are repeatedly mentioned.²⁸⁹

Niścāla's training was apparently not restricted to medicine. Several remarks in his commentary reveal his knowledge of other sciences, such as grammar²⁹⁰ and metrics.²⁹¹

The sources of numerous verses of Cakrapāṇidatta's *Cikitsāsāṃgraha* are carefully

recorded by Niścāla.²⁹² This does not imply that the stanzas that remain unidentified derive from Cakrapāṇi himself, as a considerable number of them were borrowed from Vṛnda's *Siddhayaoga* without any reference to this fact in the *Ratnaprabhā*.²⁹³ A few verses taken from Suśruta are neither indicated as such.²⁹⁴

Authors and works quoted or referred to in the *Ratnaprabhā* are:²⁹⁵ ācārya (sneha 21–22; = Dṛḍhabala), ācāryāḥ (jvara 17 and 21), Acyuta²⁹⁶ (jvara 277–278; masūrīkā 32; kṣudraroga 9), Āgama (udara 51; rasāyana 167–189; nirūha 14), Agnipurāṇa²⁹⁷ (atīsāra 72), Agniveśa (jvara 17, 41–42, 64; apasmāra 7–8; vamaṇa 14; nirūha 8–10),²⁹⁸ Akṣadeviya *Karmamālā*²⁹⁹ (rājayakṣman 9–12),³⁰⁰ Akṣadeviya *Yogaśata(ka)* (hikkāśvāsa 9; plīhayakṛt 11; karṇaroga 7), *Alpavāgbhāṭa* (mukharoga 58ab, 58cd, 65; karṇaroga 57), Amara³⁰¹ (kuṣṭha 37), Amitaprabha³⁰² (jvara 65–68, 84, 90; krimi 4; pāṇḍuroga 9; tṛṣṇā 24; unmāda 50; udāvarta 14; udara 11; śoṭha 6; galagaṇḍa 6; vṛṇaśoṭha 75; upadāṃśa 9; visarpa 32; mukharoga 87; vamaṇa 16; vireka 16 and 28), Amitaprabha's *Carakanyāsa* (anuvāsana 33), Amitaprabha's *Cikitsāśīṣaya*³⁰³ (arśas 147–151), *Amoghayogatantra*³⁰⁴ (jvarātīsāra 1–2; unmāda 21–28), *Amṛtaghaṭa*³⁰⁵ (jvara 2), *Amṛtamālā*³⁰⁶ (krimi 12; tṛṣṇā 22; vātarakta 6, 10, 12, 13, 20, 25; udara 23; kuṣṭha 17 and 150),³⁰⁷ *Amṛtavalī*³⁰⁸ (arśas 18–22; hikkāśvāsa 1; pariṇāmasūla 51–53 and 63–69; mūtrāghāta 13 and 15; śoṭha 52; vṛṇaśoṭha 53 and 55; amlapitta 1 and 21; masūrīkā 3, 9, 11; kṣudraroga 43, 50, 81–82; vṛṣya 9), Āśāḍhavarman³⁰⁹ (vamaṇa 16; anuvāsana 33), *Āśvavaidyaka* (vātavayādhi 117–126),³¹⁰ *Āśvinīsaṃhitā* (kṣudraroga 66–71), *Atisvalpayogavyākhyā* of Mādhavakara³¹¹ (jvara 247–252), Ātreya³¹² (grahaṇī 16–19;³¹³ anuvāsana 33),³¹⁴ *Āyurvedaparakāśa*³¹⁵ (jvara 3), *Āyurvedasāra*³¹⁶ (jvara 82, 105, 127, 133, 142,³¹⁷ 161, 162–164, 170, 174, 175–177, 187, 277–278; atīsāra 23–25, 67, 76, 83–84; grahaṇī 9–11, 20–21, 39, 47–49; arśas 35–44, 83–92, 100–103; pāṇḍuroga 25; raktapitta 22–24, 39–42, 43, 66–73; rājayakṣman 3, 9–12, 13–15, 24–25, 35–39, 40–46, 61–63, 75; kāsa 29; hikkāśvāsa 2–5, 11–14, 24–29; chardi 21, 23, 24; apasmāra 11, 15, 23–28; vātavayādhi 16–17, 26, 36, 39–40, 42–43, 46, 47–49, 50, 52–55, 58, 59; āmavāta 15–18, 35–37, 72; sūla 3, 6, 7, 12, 25, 37, 44–45, 50–51; pariṇāmasūla 1, 4, 16–19, 26–28; gulma 34–39, 40, 46, 47, 57–59, 71–72; hṛdroga 25; mūtrakṛcchra 11, 13, 26; mūtrāghāta 3 and 4; āsmaṇī 1, 13–16, 32, 33, 47–49; prameha 11, 22–26, 47–49; udara 31–38; plīhayakṛt 3, 30–32, 33–40; śoṭha 8, 12, 17, 35, 41–43, 44–47; vṛddhi 4–5, 12, 17, 22, 23, 26; galagaṇḍa 1, 6, 14–15, 17, 18, 23, 28, 30, 40, 47, 51, 57; ślīpada 11, 12, 20–22; vidradhi 12 and 14; vṛṇaśoṭha 49, 60, 75; nāḍīvrāṇa 2 and 3; bhagandara 22; kuṣṭha 17, 46, 64, 67, 69, 70, 104–110, 111–115, 120–121, 134–135, 150, 156, 159; udarda 1, 2, 4, 5, 8, 13; amlapitta 1, 5, 6, 14, 54; visarpa 11 and 14; masūrīkā 1, 39, 41, 42, 44; kṣudraroga 7, 10, 15, 18, 66–71, 81–82, 92, 96, 97, 122, 123, 124, 135–136; mukharoga 7, 9, 11, 14, 15, 16, 40, 53, 58cd, 63, 75–76, 91, 99–103, 107–108; karṇaroga 11–12, 17, 23–24, 28, 57; nāsāroga 21; vṛṣya 37; nirūha 22–25, 28–30, 31; nasya 11),³¹⁸ Bakula³¹⁹ (jvara 5, 28–29, 69, 117, 253–254; jvarātīsāra 26–27; atīsāra 77; grahaṇī 9–11, 16–19, 50–54; arśas 18–22, 33–34, 35–44, 51–62, 83–92, 100–103, 147–151, 159–164; agnimāndya 2, 11–12, 14–15, 30–39, 73–75, 78–79, 82, 86; krimi 5; pāṇḍuroga 4–6, 10, 27, 35–40; raktapitta 7, 39–42, 66–73, 82–96; rājayakṣman 13–15, 27, 40–46, 47–60, 87–90, 92–93, 94–95; kāsa 20 and 40–41; svarabheda

10 and 13; chardi 4–5 and 14; *trṣṇā* 4; *madātyaya* 17–19; *unmāda* 9–12, 15–16, 34–37; *apasmāra* 23–28; *vātavyādhi* 1, 2, 8–9, 24–25, 32–35, 45, 81–85, 87, 88–92, 140, 162–170, 189–198, 199–204; *vātarakta* 21–23, 33–34, 42–51, 52–58; *āmavāta* 61–65; *udāvarta* 4–5, 12, 32–33; *gulma* 46; *hṛdroga* 8, 10, 26–29; *mūtrakṛcchra* 27 and 28; *asmarī* 2–4 and 7–9; *prameha* 12, 27–28, 30–37, 47–49; *sthaulya* 6–11 and 26–28; *udara* 31–38, 57, 59–62; *plīhayakṛt* 15–18; *galagaṇḍa* 5; *ślīpada* 23 and 24–30; *vidradhi* 3; *vraṇaśoṭha* 49, 75, 76–80, 91–92, 98, 99; *kuṣṭha* 156; *udarda* 2; *kṣudraroga* 92; *mukharoga* 32–33, 63, 111–112; *Bakulakara* (jvara 64 and 65–68; *raktapitta* 82–96; *vātavyādhi* 1), *Bakulamiśra* (karṇaroga 4), *Bakulatantra*³²⁰ (*nāḍivraṇa* 3), *Bakulavyākhyā* (jvara 20; *pāṇḍuroga* 35–40), *Bālasarasvatī*³²¹ (*agnimāndya* 11–12), *Bauddhāgama* (*unmāda* 21–28),³²² *Bhadraśaunaka* (*kuṣṭha* 74–82), *Bhadravarman*³²³ (jvara 188;³²⁴ *jvarātisāra* 3–4; *arśas* 4–7; *agnimāndya* 86; *raktapitta* 12–13 and 20; *hikkāśvāsa* 6–8; *trṣṇā* 12; *vātavyādhi* 3–5; *āmavāta* 11–14; *udāvarta* 12; *asmarī* 25; *prameha* 18 and 19;³²⁵ *vidradhi* 12; *bhagandara* 20–21 and 23; *upadaṃśa* 7 and 10; *kuṣṭha* 32; *visarpa* 22, 27, 30; *masūrikā* 33; *kṣudraroga* 81–82 and 86; *nāsāroga* 23; *vamana* 6),³²⁶ *Bhāluki* (jvara 18, 20, 149, 150, 153–156, 157–158, 237–238, 292; *asmarī* 47–49; *netraroga* 19), *Bhānumatī* (*agnimāndya* 73–75; *raktapitta* 35–37; *trṣṇā* 2, 3, 7, 8; *vātavyādhi* 3–5, 8–9, 58; *udāvarta* 34; *hṛdroga* 5 and 10; *asmarī* 2–4 and 7–9; *galagaṇḍa* 33; *vraṇaśoṭha* 1–2; *bhagna* 2, 5, 16–27; *kuṣṭha* 162; *visarpa* 6; *kṣudraroga* 24–25, 32, 84–85; *mukharoga* 1, 20, 23, 24, 25–26, 28–31, 32–33, 56, 99–103; *sneha* 11; *vireka* 28; *anuvāsana* 5, 19–22, 23; *nirūha* 8–10, 26–27, 32–33), *Bhānumatīkāra* (*bhagna* 14–15), *Bhānumatīkṛt* (*arocaka* 2; *chardi* 3; *vātavyādhi* 3–5; *vraṇaśoṭha* 99; *mukharoga* 68), *Bhāṣya* (*arśas* 76–82),³²⁷ *Bhāṭāra*(ka)³²⁸ (jvara 3, 5, 14–15, 19, 20, 21, 22, 23, 49, 65–68, 203–205, 219–225, 235, 291; *arśas* 159–164; *agnimāndya* 11–12; *rājayakṣman* 24–25; *gulma* 63–67 and 91; *udara* 51; *plīhayakṛt* 19–23; *sveda* 1, 3, 16–17; *anuvāsana* 38–39), *Bhāṭāraharicandra* (jvara 3 and 10–11; *vireka* 2), *bhāṭāraharicandrānuyāyinaḥ* (*agnimāndya* 11–12), *Bhāṭāraharicandra's Svasaṃhitā* (*sneha* 6), *Bhavadeva*³²⁹ (*vātavyādhi* 227–271),³³⁰ *Bhavadevīya Gandhaśāstra* (*vātavyādhi* 227–271),³³¹ *Bhavya*³³² (*arśas* 35–44; *kāsa* 20; *hṛdroga* 10; *udara* 57; *kuṣṭha* 156), *Bhavya's Vaidyapradīpa* (*atisāra* 30), *Bhavyadatta* (jvara 3 and 5; *arśas* 33–34; *vātavyādhi* 205–226; *prameha* 30–37; *ślīpada* 24–30; *mukharoga* 1, 20, 67; *karṇaroga* 23–24), *Bhavyadattasamgraha Vaidyapradīpa* (*netraroga* 19), *Bhavyadatta's Vaidyakapradīpasamgraha* (jvara 3), *Bhavyadatta's Vaidyapradīpa* (jvara 3, 41–42, 165–166; *kāsa* 1–3; *mukharoga* 32–33 and 65; *karṇaroga* 16), *Bhavyadatta's Yogaratnākara* (jvara 31–32), *Bheḍa* (jvara 5, 55, 64, 79, 85, 117, 124, 128, 145–146, 182–183, 196–197, 281; *atisāra* 39–45, 61–62, 69, 85–87, 100; *arśas* 4–7 and 35–44; *agnimāndya* 84 and 89; *krimi* 10 and 12; *rājayakṣman* 65–66; *hikkāśvāsa* 1; *arocaka* 5–7; *chardi* 6–11 and 21; *madātyaya* 3–6 and 20; *unmāda* 5, 13–14, 34–37; *apasmāra* 17–22; *vātavyādhi* 16–17, 31, 47–49, 95, 180–184; *vātarakta* 1–3; *ūrustambha* 9; *hṛdroga* 1; *mūtrakṛcchra* 11; *prameha* 18, 22–26, 30–37; *udara* 39; *vraṇaśoṭha* 75 and 81–83; *upadaṃśa* 8; *sneha* 1 and 33; *vamana* 9, 10, 11, 20–21; *vireka* 29–30; *anuvāsana* 35; *nasya* 22–23), *Bhīṣaṇmuṣṭi*³³³ (*arśas* 4–7;³³⁴ *unmāda* 51;³³⁵ *śoṭha* 36), *Bhoja* (jvara 188; *atisāra* 21–22; *arśas* 142–146 and 147–151; *kāsa* 46–47; *chardi* 1; *asmarī* 50–53; *galagaṇḍa* 32; *sneha* 11; *nirūha* 20–21), *Bindusāra*³³⁶ (jvara 141,

199–200, 231, 232–233; *jvarātisāra* 1–2,³³⁷ 3–4, 16–25; *krimi* 12; *raktapitta* 25 and 35–37; *kāsa* 10–15 and 39; *hikkāśvāsa* 6–8; *arocaka* 5–7 and 13; *chardi* 1; *unmāda* 51; *apasmāra* 29; *vātavyādhi* 42–43 and 56–57; *ūrustambha* 5; *hṛdroga* 6–7; *mūtrakṛcchra* 17 and 29–36;³³⁸ *asmarī* 30–31; *udara* 43; *galagaṇḍa* 2, 8, 25; *vidradhi* 2 and 7; *vraṇaśoṭha* 52; *bhagandara* 10; *kuṣṭha* 23 and 25;³³⁹ *mukharoga* 72; *karṇaroga* 2 and 32; *nāsāroga* 9–10; *netraroga* 8 and 27; *vṛṣya* 8, 50–51, 54),³⁴⁰ *Bodhicaryāvatāra* (*unmāda* 17),³⁴¹ *Brhātatantrapradīpa*³⁴² (*pariṇāmaśūla* 57–62 and 63–69; *mukharoga* 1 and 9), *Cakra* (jvara 5, 6, 10–11, 14–15, 17, 19, 20, 28–29, 47, 49, 65–68, 84, 100–102, 103, 117, 124, 133, 149, 150, 162–164, 165–166, 188, 213, 235, 253–254, 255, 256–257, 277–278, 291; *jvarātisāra* 16–25; *atisāra* 1–3, 21–22, 30, 54–56, 60, 73–75, 77; *grahaṇī* 9–11, 16–19, 50–54; *arśas* 33–34, 100–103, 111–114, 133–141, 142–146, 147–151, 159–164, 165–171; *agnimāndya* 14–15, 18–22, 73–75; *krimi* 5; *pāṇḍuroga* 4–6, 25, 27; *raktapitta* 7, 30–33, 39–42, 66–73, 82–96; *rājayakṣman* 13–15, 24–25, 40–46, 47–60, 83–86, 87–90; *kāsa* 16–19, 30–31, 37–38, 40–41, 42–51, 52–58; *ūrustambha* 8 and 12; *āmavāta* 9, 35–37, 61–65; *śūla* 50–51, 63, 65–67; *udāvarta* 25, 26–27, 29–30, 35; *gulma* 9–10, 57–59, 62, 71–72; *hṛdroga* 8, 23–24, 26–29; *mūtrāghāta* 1; *asmarī* 2–4, 7–9, 10; *prameha* 27–28 and 30–37; *sthaulya* 1, 5, 26–28; *udara* 1, 11, 16, 18, 31–38, 55–56, 57, 58, 59–62, 64; *plīhayakṛt* 15–18 and 19–23; *śoṭha* 6, 8, 14, 24–28, 44–47, 48–51; *galagaṇḍa* 5, 25, 33, 49; *ślīpada* 24–30 and 31; *vraṇaśoṭha* 48, 65–66, 68, 75, 76–80, 91–92, 98, 99; *nāḍivraṇa* 3 and 17–18; *upadaṃśa* 4; *bhagna* 1, 3, 4, 11, 16–27; *kuṣṭha* 2, 8–12, 24, 50–51, 71–72, 111–115, 134–135, 150; *amlapitta* 1 and 23–24; *visarpa* 3–4, 15, 16, 18, 36–40; *kṣudraroga* 1, 3, 10, 21–22, 23, 31, 84–85, 92, 98, 126–133; *mukharoga* 1, 25–26, 32–33, 37, 41, 44, 45, 52, 57, 60, 63, 67, 70, 73–74, 82, 84, 111–112, 113–117; *karṇaroga* 18–22, 23–24, 30, 61; *rasāyana* 190–195; *vṛṣya* 15–25, 26–36, 37, 38–44; *sneha* 1, 21–22, 28; *sveda* 16–17; *vamana* 9 and 16; *vireka* 8–9, 17, 26; *anuvāsana* 1–2, 7–10, 19–22, 23, 24–25, 33, 38–39; *nirūha* 14 and 26–27; *nasya* 6), *Cakra's Dīpikā* (*karṇaroga* 23–24), *Cakra's Svasaṃgraha* (*grahaṇī* 77–85), *Cakra's Vyagradaridraśubhaṅkara* (*vraṇaśoṭha* 46; *upadaṃśa* 10), *Cakra's Yogasaṃgraha*³⁴³ (*vṛddhi* 22), *Cakradatta* (jvara 20, 64, 65–68, 90; *vraṇaśoṭha* 48), *Cakradattavyākhyā* (jvara 20), *Cakrapāṇi* (jvara 199–200, 247–252, 277–278), *Cakrapāṇidatta* (introductory prose; *prameha* 18), *Cakrasaṃgraha* (introductory verses; *vraṇaśoṭha* 48; *visarpa* 30), *cakraśiṣyāḥ* (*agnimāndya* 2;³⁴⁴ *pāṇḍuroga* 35–40; *vātavyādhi* 106–116),³⁴⁵ *Cakraṭippaṇi*³⁴⁶ (*pāṇḍuroga* 35–40),³⁴⁷ *Cakravyākhyā* (jvara 20),³⁴⁸ *Cakṣuṣyeṇa* (jvara 135–136; *svarabheda* 13; *vātavyādhi* 81–85; *vātarakta* 13; *galagaṇḍa* 3–4, 31, 32, 35; *visarpa* 9 and 33; *mukharoga* 1, 9, 75–76, 88, 97–98, 111–112; *nāsāroga* 2–3; *sneha* 1 and 6; *sveda* 1, 10, 11), *Candana* (*amlapitta* 23–24; *vireka* 8–9),³⁴⁹ *Candanabhoda*³⁵⁰ (*vraṇaśoṭha* 75³⁵¹ and 76–80),³⁵² *Caṇḍikā*³⁵³ (*unmāda* 21–28),³⁵⁴ *Candrakalā*³⁵⁵ (*agnimāndya* 14–15),³⁵⁶ *Candrakalāṭikā* (*atisāra* 64;³⁵⁷ *vraṇaśoṭha* 75),³⁵⁸ *Candraṭa*³⁵⁹

(jvara 2, 64, 71, 75, 103, 116, 117, 127, 178–179, 182–183, 211, 253–254, 282; jvarātīsāra 1–2 and 16–25; atīsāra 1–3; grahaṇī 29–36, 55–59, 77–85; arśas 120–126; agnimāndya 90–91; raktapitta 17, 28–29, 35–37, 39–42, 79–81; kāsa 24–26, 30–31, 37–38, 59–64; svarabheda 13; arocaka 2 and 3–4; chardi 14; tṛṣṇā 22; madātyaya 20; 34–37; vātavyādhi 16–17; āmavāta 15–18 and 39–43; śūla 12, 50–51, 54, 59–60; udāvarta 7; hṛdroga 25; prameha 18, 22–26, 30–37, 38–39; śoṭha 24–28; galagaṇḍa 31; vidradhi 8 and 19; vṛṇaśoṭha 49 and 76–80; nāḍivṛaṇa 6; bhagandara 13–27; upadaṃśa 4, 5, 10, 11, 15; bhagna 12–13; kuṣṭha 17, 25, 29, 30, 32, 34, 35, 41, 74–82, 131–133, 134–135, 150; visarpa 14, 30, 31; kṣudraroga 66–71 and 72–75; mukharoga 9 and 111–112; kārṇaroga 1, 8–9, 11–12, 30, 35; nāsāroga 29–31; netraroga 20; rasāyana 160; vṛṣya 15–25 and 50–51; sneha 30; nirūha 22–25, 26–27, 28–30; nasya 18), *Candratasamgraha* (mūrchā 1–2; unmāda 21–28; vṛddhi 22; visarpa 22; anuvāsana 35; nasya 22–23), *Candrikā* (jvara 46, 247–252, 256–257; atīsāra 1–3; arśas 142–146; agnimāndya 73–75; pāṇḍuroga 2; rājayakṣman 1–2 and 35–39; hikkāśvāsa 2–5; tṛṣṇā 2 and 7; vātavyādhi 6, 8–9, 96–105; āmavāta 35–37; gulma 98; hṛdroga 5; aśmarī 2–4, 7–9, 10, 13–16, 17–19, 34, 50–53; prameha 2–3 and 16; vṛddhi 10; galagaṇḍa 16, 26, 32, 41, 42, 44, 53–56, 61; ślīpada 10; vidradhi 1 and 17–18; vṛṇaśoṭha 1–2 and 55; nāḍivṛaṇa 2, 6, 16; śūkadoṣa 3, 6, 7, 8, 9; bhagna 2, 4, 5, 14–15, 16–27; kuṣṭha 71–72, 159, 162; visarpa 6, 8, 15; mukharoga 1, 4, 20, 22, 23, 24, 25–26, 32–33, 34, 37, 41, 43, 44, 46–47, 50, 56, 58ab, 58cd, 59, 60, 61, 63, 69, 77, 84; kārṇaroga 1, 3, 4, 32, 49; nāsāroga 12, 13, 15; netraroga 16, 20, 26; sveda 16–17; vamaṇa 16; vireka 28), *Candrikākāra* (jvara 3 and 150; aśmarī 13–16; prameha 4; vṛddhi 6; vṛṇaśoṭha 99; visarpa 6; kārṇaroga 11–12), *Candrikākṛt* (jvara 65–68 and 253–254; vātavyādhi 3–5 and 81–85; vṛddhi 6; galagaṇḍa 40, 48, 51; vidradhi 8; kṣudraroga 32; mukharoga 45 and 68; kārṇaroga 32 and 43), *Candrikāmata* (arśas 147–151; kṣudraroga 32), *candrikāmātānūvādinah* (galagaṇḍa 33), *Candrikāsamgraha* (bhagna 2), *Candrikāvya-khyā* (bhagna 16–27), *Caraka* (passim),³⁶⁰ *Carakapariśiṣṭakāra*³⁶¹ (jvara 150; sneha 6; nirūha 3), *Carakapariśiṣṭakṛt* (sveda 16–17), *Carakavākyapratīṣṭakāra* (udara 11), *Carakottaratānta* (jvara 57; nāḍivṛaṇa 2, 3, 16; bhagandara 1 and 4; śūkadoṣa 2, 3, 8, 9; bhagna 1; kṣudraroga 1, 2, 4, 7, 9, 10, 11, 14, 16, 17, 18, 21–22, 24–25, 26, 32, 33, 34, 35–37, 84–85, 96; mukharoga 9 and 32–33),³⁶² *Caturadevīya Gandhaśāstra*³⁶³ (mukharoga 109–110),³⁶⁴ *Cikitsākalikā*³⁶⁵ (jvara 3; vātavyādhi 147–149; udara 59–62; vṛddhi 2; netraroga 1; sveda 16–17), *Cikitsāśraya*³⁶⁶ (vātarakta 7), *Cikitsāti-śaya* (arśas 147–151; chardi 23),³⁶⁷ *dākṣiṇātyāh* (vātavyādhi 96–105),³⁶⁸ *anuvāsana* 33),³⁶⁹ *Daṇḍin* (jvara 1),³⁷⁰ *Dāruvāha*³⁷¹ (jvara 63), *Dāsarasāyana*³⁷² (kuṣṭha 17), *Dattaka*³⁷³ (vātavyādhi 227–271),³⁷⁴ *Deśāṅga*³⁷⁵ (mūtrakṛcchra 28),³⁷⁶ *Dharaṇīdhara* (rājayakṣman 87–90; udara 26; kṣudraroga 66–71),³⁷⁷ *Dharmakīrti* (unmāda 17),³⁷⁸ *Dīpikā*³⁷⁹ (jvara 244–246, 247–252, 270; pāṇḍuroga 9 and 35–40; unmāda 34–37; gulma 9–10; udara 19; kuṣṭha 111–115; sneha 7, 11, 21–22; vireka 28), *Dīpikākāra*³⁸⁰ (jvara 4; gulma 34–39), *Dīpikākṛt* (jvara 3 and 47; raktapitta 51; rājayakṣman 9–12; kāsa 10–15; hikkāśvāsa 1; chardi 1; vātavyādhi 2; aśmarī 35–36; prameha 27–28; udara 31–38; śoṭha 24–28), *Dravyāvalī*³⁸¹ (grahaṇī 47–49; rājayakṣman 87–90; chardi 21; vātavyādhi 185–188 and 227–271; pariṇāmasūla 57–62; śoṭha 8; kuṣṭha 159; kṣudraroga 92; mukharoga 77 and 99–103 and 113–117), *Dr̥ḍhabala* (jvara 20, 31–32,

41–42, 65–68, 247–252; arśas 93–95; rājayakṣman 65–66; tṛṣṇā 1, 9, 10–11; gulma 20–23; mūtrāghāta 1; udara 18; sneha 6, 21–22, 23, 30; vamaṇa 9, 12, 13, 14, 20–21; vireka 2, 8–9, 10–15, 17, 20–21, 26, 27, 28, 29–30; anuvāsana 1–2, 11–12, 13, 14–18, 19–22, 24–25, 32, 33, 35, 36–37, 40–41; nirūha 1, 4–6, 8–10, 11, 12, 13, 17, 20–21, 26–27, 32–33, 35; nasya 1, 2, 11, 12, 13–16), *Dr̥ḍhabalasamskāra* (raktapitta 6; nirūha 18–19), *Dvādaśasahasravāgbhāṭa*³⁸² (mukharoga 24), *Ekārṇavanighaṇṭu*³⁸³ (jvara 65–68), *Gadādhara* (jvara 64, 178–179, 256–257; arśas 147–151; agnimāndya 77 and 82; pāṇḍuroga 27; hikkāśvāsa 19–20; chardi 15–16; vātavyādhi 1, 10–12, 205–226; aśmarī 11–12; vṛṇaśoṭha 99; kṣudraroga 92; mukharoga 57; kārṇaroga 16; nāsāroga 7–8), *Gadavinīscaya*³⁸⁴ (vṛṇaśoṭha 48), *Gandhaśāstra*³⁸⁵ (vātavyādhi 227–271 and 276–278; mukharoga 73–74 and 109–110),³⁸⁶ *Gandhaśāstranighaṇṭu*³⁸⁷ (vātavyādhi 199–204 and 227–271), *Gandhatantra* (vātavyādhi 227–271),³⁸⁸ *Gandhatantraśāstra* (vātavyādhi 227–271),³⁸⁹ *gāndhikāh* (vātavyādhi 93–94), *gaudāh* (jvara 124),³⁹⁰ *kṣudraroga* 43; kārṇaroga 18–22;³⁹¹ nirūha 26–27),³⁹² *Gaudapāṭha* (kuṣṭha 8–12),³⁹³ *Gaudavyākhyā* (kārṇaroga 23–24), *Gayadāsa* (vātavyādhi 87, 205–226, 276cd–278; vātarakta 40; gulma 40 and 46), *Gopati*,³⁹⁴ *Gopurarakṣita*³⁹⁵ (jvara 64), *Govardhana*³⁹⁶ (jvara 20 and 64; arśas 111–114 and 142–146; agnimāndya 73–75; rājayakṣman 40–46; kāsa 59–64; madātyaya 11–12; unmāda 21–28 and 29–30; gulma 9–10; udara 57),³⁹⁷ *Govardhana's Arthamālā* (jvara 64),³⁹⁸ *Govardhana's Br̥hātatantrapradīpikā* (jvara 232–233; jvarātīsāra 16–25), *Govardhana's Karmamālā*³⁹⁹ (arśas 133–141), *Govardhana's Kaumudī* (śoṭha 48–51), *Govardhana's Nyāyasārāvalī* (arśas 147–151; rājayakṣman 9–12 and 13–15), *Govardhana's Paribhāṣāvalī*⁴⁰⁰ (raktapitta 14), *Gu-ṇākara* (atīsāra 1–3; pariṇāmasūla 24), *guru(pādāh)* (jvarātīsāra 1–2; arśas 107–110; pāṇḍuroga 2; raktapitta 6; rājayakṣman 65–66; svarabheda 6; vātavyādhi 24–25 and 47–49; vṛṇaśoṭha 46; upadaṃśa 3; kuṣṭha 116–119, 156, 159; visarpa 15; mukharoga 32–33; kārṇaroga 4; netraroga 36; anuvāsana 24–25), *Gurudattasamgraha* (vṛṇaśoṭha 69),⁴⁰¹ *Gurugrantha*⁴⁰² (gulma 40; hṛdroga 5; mūtrāghāta 4 and 5; aśmarī 7–9),⁴⁰³ *guruparamparā* (arśas 165–171),⁴⁰⁴ *Guruparamparāvyākhyā* (grahaṇī 29–36),⁴⁰⁵ *gurusampradāya* (śūla 3 and 63; pariṇāmasūla 36–41 and 75–76),⁴⁰⁶ *Haramekhalā* (jvara 282; agnimāndya 3 and 11–12; śūla 56; kṣudraroga 52, 76–79, 81–82, 88, 98, 99, 121; mukharoga 96; vṛṣya 54 and 56),⁴⁰⁷ *Haramekhalānighaṇṭu*⁴⁰⁸ (vṛṣya 54), *Hārāvalī*⁴⁰⁹ (apasmāra 23–28),⁴¹⁰ *vṛṣya* 26–36),⁴¹¹ *Haricandra*⁴¹² (jvara 64; sneha 6), *Hārīta* (jvara 4, 5, 8–9, 10–11, 33, 71, 75, 80, 86, 92–98, 117, 118, 123, 127, 149, 150, 151, 160, 161, 178–179, 185–186, 187, 188, 206, 210, 217, 218, 261, 292; jvarātīsāra 16–25; atīsāra 17–18 and 57–59; grahaṇī 47–49; arśas 8–10; pāṇḍuroga 44–47 and 51; raktapitta 39–42 and 66–73; rājayakṣman 9–12 and 47–60; hikkāśvāsa 2–5 and 21–23; chardi 22; tṛṣṇā 2; unmāda 21–28 and 34–37; vātavyādhi 127–131 and 180–184; āmavāta 35–37; śūla 3, 10, 12, 20, 25, 27, 33; udāvarta 7, 26–27, 28; gulma 1–3, 15, 17, 18–19, 43–44; prameha 22–26 and 30–37; udara 46 and 55–56; śoṭha 6; kuṣṭha 54, 55, 68; visarpa 18 and 33; masūrīkā 1, 4, 17, 18–20, 23, 27, 35, 37; kṣudraroga 125; rasāyana 160, 161–162, 166, 190–195; vṛṣya 1; anuvāsana 7–10; nirūha 26–27), *hārīṭīyāh* (jvara 18), *Indumatī*⁴¹³ (jvara 3; pāṇḍuroga 19–20 and 35–40; rājayakṣman 40–46; kāsa 10–15; arocaka 1; vātavyādhi 136–137; śoṭha 48–51; vṛṇaśoṭha 99; kuṣṭha 116–119 and 120–121; kṣudraroga 31, 32, 43), *Īśāna*⁴¹⁴

(jvara 19, 20, 65–68, 247–252; atisāra 104; rājayakṣman 24–25 and 40–46; madātyaya 11–12; unmāda 21–28, 29–30, 39–43; apasmāra 7–8; vātavyādhi 87 and 199–204; vātarakta 40; udara 11 and 57; vṛṇaśoṭha 99; kṣudraroga 126–133; sneha 21–22; vamaṇa 14; vireka 8–9 and 26; anuvāsana 7–10, 24–25, 33; nirūha 11, 13, 14, 35; nasya 6), *Īśānadeva*⁴¹⁵ (jvara 20; atisāra 1–3; vamaṇa 16), *Īśānasena*⁴¹⁶ (unmāda 29–30), *Īśvarasena*⁴¹⁷ (jvara 5 and 64), *Jātūkarṇa* (jvara 4, 5, 64, 124, 149, 178–179, 196–197, 219–225, 244–246, 272–274; atisāra 60 and 104; grahaṇī 47–49; arśas 115–117, 118–119, 127–131; rājayakṣman 9–12 and 40–46; kāsa 10–15; tṛṣṇā 10–11; unmāda 34–37; apasmāra 9–10, 17–22, 31–32; vātavyādhi 140, 171–174, 175–179; vātarakta 40; ūrustambha 13; āmavāta 35–37; udāvarta 29–30 and 35; gulma 9–10, 20–23, 71–72; prameha 27–28; udara 14–15, 16, 21–22, 57, 58; śoṭha 8, 15–16, 24–28, 33–34, 35, 48–51; vṛṇaśoṭha 98 and 99; kuṣṭha 104–110 and 111–115; visarpa 19 and 22; masūrīkā 21–22, 36, 37, 38; kṣudraroga 125; mukharoga 73–74 and 113–117; karṇaroga 23–24; netraroga 15 and 19; vireka 10–15; anuvāsana 1–2 and 33), *Jejjata* (jvara 4, 5, 14–15, 18, 19, 20, 47, 49, 64, 65–68, 124, 133, 149, 150, 188, 203–205, 219–225, 235, 237–238, 247–252, 253–254, 255, 256–257, 284, 291; atisāra 1–3, 93–94, 104; grahaṇī 20–21, 22, 23–27, 47–49; arśas 111–114 and 133–141; agnimāndya 30–39, 73–75, 82, 90–91; pāṇḍuroga 35–40; raktapitta 8–11, 17, 22–24, 30–33; rājayakṣman 9–12, 13–15, 24–25, 35–39, 40–46, 47–60, 83–86; kāsa 1–3, 8, 16–19, 50–53, 59–64; hikkāśvāsa, intr., 2–5, 17, 19–20; chardi 1, 4–5, 6–11, 12, 15–16, 21; tṛṣṇā 3 and 10–11; madātyaya 11–12 and 28; unmāda 15–16, 21–28, 29–30, 34–37, 39–43; apasmāra 2, 7–8, 9–10, 17–22, 31–32; vātavyādhi 2, 3–5, 10–12, 13–15, 138–139, 140, 175–179; vātarakta 40; udāvarta 26–27, 29–30, 34, 35; gulma 9–10, 17, 57–59, 62; hṛdroga 5, 23–24, 25; āsmaṇī 2–4, 13–16, 35–36; prameha 27–28; udara 3–4, 6–10, 11, 14–15, 16, 18, 19, 27–30, 31–38, 57, 64; pīḥayakṣ 9 and 19–23; śoṭha 8, 14, 15–16, 24–28, 29, 33–34, 38–39, 48–51; galagaṇḍa 49; vṛṇaśoṭha 99; nāḍivraṇa 2, 6, 16; kuṣṭha 111–115 and 148; visarpa 2, 3–4, 17, 18; kṣudraroga 1 and 32; mukharoga 32–33, 59, 73–74; karṇaroga 16, 18–22, 23–24, 30; nāsāroga 7–8; netraroga 16; vṛṣya 1; sneha 21–22; vamaṇa 9 and 14; vireka 17 and 26; anuvāsana 7–10; nirūha 14 and 26–27; nasya 6), *Jejjatamatānuyāyin*(aḥ) (grahaṇī 47–49 and 50–54; arśas 127–131; vireka 28), *Jinadāsa*⁴¹⁸ (jvara 5; rājayakṣman 40–46; śoṭha 48–51; vṛṇaśoṭha 99; mukharoga 11), *Jinadāsa's Karmadandī* (jvara 20 and 124), *Jīvanātha's Lauhaśāstra*⁴¹⁹ (raktapitta 82–96),⁴²⁰ *Jñānaśrī*⁴²¹ (śūla 12; śoṭha 54; nāsāroga 9–10), *Kalahadāsa*⁴²² (jvara 65–68),⁴²³ *Kālapāda*⁴²⁴ (rasāyana 167–189),⁴²⁵ *Kālidāsa*⁴²⁶ (mukharoga 113–117), *Kalyāṇasiddhi* (grahaṇī 29–36; arśas 120–126; rājayakṣman 9–12, 24–25, 47–60; vireka 10–15),⁴²⁷ *Kāmarūpa*⁴²⁸ (vātarakta 4),⁴²⁹ *kāmarūpiyāḥ* (kṣudraroga 43),⁴³⁰ *Kāmaśāstra* (madātyaya 17–19),⁴³¹ *Kāṅkāyana* (āmavāta 35–37), *Kapila* (agnimāndya 9–10), *Kapilabala* (jvara 64 and 77; sneha 6), *Karavīra* (kuṣṭha 71–72), *Karmamālā*⁴³² (agnimāndya 14–15; raktapitta 66–73; svarabheda 6; chardi 27; śūla 50–51; gulma 40; prameha 17; kuṣṭha 29 and 159; mukharoga 77),⁴³³ *Karmamālāṭīkā* (atisāra 64),⁴³⁴ *Kārtika* (jvara 54, 253–254, 256–257; udāvarta 34; gulma 40; āsmaṇī 13–16; galagaṇḍa 40 and 51; nāḍivraṇa 2 and 17–18; bhagandara 5; upadamaṣa 4; śūkadoṣa 2, 3, 8, 9; bhagna 2, 5, 14–15, 16–27; visarpa 15; kṣudraroga 18 and 84–85; mukharoga 25–26, 32–33, 57; svēda 16–17; vamaṇa 16; vireka 8–9 and

28; nirūha 4–6), *Kārttikakuṇḍa* (jvara 20, 46, 54, 64; vātavyādhi 81–85; pīḥayakṣ 5 and 9), *kāsmīrāḥ* (jvara 256–257; arśas 49–50; raktapitta 66–73; gulma 41–42; udara 14–15 and 57; kuṣṭha 6–7 and 8–12; nasya 1), *Kāśyapa* (sneha 6), *Kāṭoka*⁴³⁵ (nāḍivraṇa 6 and 16; visarpa 6; masūrīkā 27; kṣudraroga 1; netraroga 16),⁴³⁶ *Kauśika* (jvara 292), *Kharanāda* (jvara 20 and 261; bhagandara 2), *Kṛṣṇātreyā* (jvara 64 and 247–252; atisāra 80–82; arśas 49–50; rājayakṣman 40–46; chardi 15–16; unmāda 31–33; vātavyādhi 64, 199–204, 227–271; udara 59–62; pīḥayakṣ 33–40; vṛṇaśoṭha 76–80; kṣudraroga 91; nasya 11), *Kṣārapāṇi* (jvara 20, 65–68, 193, 203–205; agnimāndya 77; rājayakṣman 65–66; kāsa 10–15 and 27; hikkāśvāsa 19–20 and 30–33; vātavyādhi 3–5, 10–12, 199–204; gulma 45; udara 3–4,⁴³⁷ 11, 23; pīḥayakṣ 30–32; śoṭha 1 and 6; vṛṇaśoṭha 90 and 91–92; kuṣṭha 25; sneha 13–14), *Lauhapattra*⁴³⁸ (pāṇḍuroga 11), *Lauhaśāstra* (arśas 76–82;⁴³⁹ masūrīkā 9),⁴⁴⁰ *lauhaśāstrajñāḥ* (pariṇāmasūla 21–22), *Lohaśāstra*⁴⁴¹ (śūla 57,⁴⁴² mukharoga 73–74),⁴⁴³ *lohaśāstravidyaḥ* (śūla 63), *Lokanātha* (arśas 107–110),⁴⁴⁴ *lokavyavahāra* (vṛṣya 56),⁴⁴⁵ *Lokoka*⁴⁴⁶ (vātavyādhi 272–276ab),⁴⁴⁷ *Mādhava* (arśas 127–131; kāsa 59–64; unmāda 29–30; apasmāra 7–8; vātavyādhi 1; gulma 9–10; udara 27–30 and 57; śoṭha 15–16 and 48–51; vṛṇaśoṭha 48; masūrīkā 39), *Mādhava's Prasnasahasravidhāna* (vātavyādhi 1), *Mādhava's Suśrutavārtika* (vātavyādhi 3–5), *Mādhava's Yogavyākhyā* (jvara 124;⁴⁴⁸ arśas 127–131⁴⁴⁹ and 133–141), *Mādhavagrantha* (vṛṇaśoṭha 48), *Mādhavakara* (jvara 284; rājayakṣman 40–46; kāsa 59–64; gulma 17; vṛṇaśoṭha 68), *Mādhavakāra* (karṇaroga 23–24), *Mādhavakara's Dravyaguṇa*⁴⁵⁰ (jvara 31–32,⁴⁵¹ agnimāndya 5),⁴⁵² *Mādhavakara's Prasnasahasravidhāna* (jvara 41–42), *Mādhava(kara)'s Svalpa-yogavyākhyā*⁴⁵³ (raktapitta 14; udara 27–30), *Mādhava(kara)'s Yogavyākhyā* (arśas 111–114; unmāda 34–37), *Mādhavasamgraha*⁴⁵⁴ (hikkāśvāsa 30–33),⁴⁵⁵ *Madhyasamhitā* of Vāgbhaṭa(gupta) (jvara 235, 237–238, 247–252, 288–290, 291; atisāra 104; arśas 96–99, 120–126, 159–164; agnimāndya 77; madātyaya 21–22), *Madhyavāgbhaṭa(samhitā)* (jvara 3; atisāra 4–5; grahaṇī 5–6 and 9–11; arśas 1–3; agnimāndya 1, 2, 6–8, 28; krimi 12; pāṇḍuroga 22–23; rājayakṣman 47–60; kāsa, intr.; hikkāśvāsa, intr.; madātyaya 21–22; unmāda 29–30; mukharoga 1, 32–33, 41, 43, 45, 50, 58cd, 59, 60, 61, 63, 70; karṇaroga 3, 11–12, 23–24, 50, 56, 57, 63–65; netraroga 6; anuvāsana 33), *Mahāmantrānusāraṇīya*⁴⁵⁶ (jvara 235),⁴⁵⁷ *Mahādhara's Viśvavallabhā*⁴⁵⁸ (vṛddhi 22), *maitreyāḥ*⁴⁵⁹ (anuvāsana 33), *Mālā*⁴⁶⁰ (vireka 28),⁴⁶¹ *Manu* (jvara 65–68), *Mārkaṇḍeyapurāṇa*⁴⁶² (rājayakṣman 47–60),⁴⁶³ *Maudgalyāyana*⁴⁶⁴ (madātyaya 11–12; gulma 63–67; mukharoga 73–74),⁴⁶⁵ *Nāgabhartṛtantra*⁴⁶⁶ (grahaṇī 16–19; svarabheda 6; vṛṇaśoṭha 98 and 99; nāḍivraṇa 16; śūkadoṣa 9; kuṣṭha 1, 2, 25, 28, 88–90, 131–133, 144–147, 149; mukharoga 9), *Nāgadeva*⁴⁶⁷ (mukharoga 32–33), *Nāgārjuna* (jvara 64; atisāra 54–56; grahaṇī 37–38, 86–92, 93–99; arśas 66–75; agnimāndya 29; rājayakṣman 27; madātyaya 20; vātavyādhi 227–271; āmavāta 2, 4, 9; pariṇāmasūla 77–78),⁴⁶⁸ *Nāgārjuna's Vārtāmālā*⁴⁶⁹ (agnimāndya 14–15; chardi 19), *Nāgārjuna's Yogamañjarī* (śūla 54), *Nāgārjunīya* (raktapitta 26;⁴⁷⁰ śūla 50–51), *Nāgārjunīyā Ārogyamañjarī*⁴⁷¹ (agnimāndya 72), *Nāgārjunīya Mahendrakalpa*⁴⁷² (arśas 4–7), *Nalanrpati's Sūdaśāstra*⁴⁷³ (grahaṇī 60–61;⁴⁷⁴ agnimāndya 4), *Nānābhīdhāna* (mūtrakcchra 11), *Nānārtha*⁴⁷⁵ (sthāulya 31;⁴⁷⁶ pīḥayakṣ 33–40),⁴⁷⁷ *Naradatta*⁴⁷⁸ (atisāra 104;⁴⁷⁹ ślīpāda 24–30),⁴⁸⁰ *naradattasampradāyinaḥ*⁴⁸¹ (ślīpāda

24–30), *Naradattasiṣyatiṭṭippanī* (vraṇaśoṭha 88–89),⁴⁸² Naradeva⁴⁸³ (kṣudraroga 92), *Nāvanīta* (raktapitta 79–81; kāsa 48–49; kuṣṭha 97–100),⁴⁸⁴ *Nāvanītakasamhitā* (nāsāroga 120–126; vātavyādhi 180–184; kuṣṭha 104–110),⁴⁸⁶ *Nāvanītakasamhitā* (nāsāroga 29–31), *Nāvanītantra* (svarabheda 12), *Nighaṇṭu*⁴⁸⁷ (grahaṇī 47–49; arśas 142–146; śoṭha 8),⁴⁸⁸ Nimi (karṇaroga 32), *Nyāyāsāradī*⁴⁸⁹ (gulma 57–59), *paitāmahāḥ*⁴⁹⁰ (anuvāsana 33),⁴⁹¹ *Pālakāpya*⁴⁹² (jvara 3⁴⁹³ and 65–68),⁴⁹⁴ Pāṇini (śūla 12), Parāśara (atīśāra 101; rājayakṣman 67–71; nirūha 4–6 and 8–10), *Pātāñjalalohaśāstra*⁴⁹⁵ (arśas 180), Pauṣkalāvata (jvara 188), Piṅgala (śūla 12),⁴⁹⁶ Pitṛjyeṣṭha (anuvāsana 33),⁴⁹⁷ prābhākaraḥ⁴⁹⁸ (raktapitta 82–96),⁴⁹⁹ Prthvisimha (vātavyādhi 227–271),⁵⁰⁰ Puṣkalāvata (jvara 48 and 64), *Putrotsavāloka*⁵⁰¹ (rājayakṣman 27 and 30–34),⁵⁰² rādhīyāḥ⁵⁰³ (jvara 253–254; agnimāndya 9–10),⁵⁰⁵ *Rādhīya*⁵⁰⁶ (masūrīkā 5),⁵⁰⁷ Rakṣitaguru⁵⁰⁸ (mukharoga 73–74), Rakṣita(pādāḥ)⁵⁰⁹ (jvara 20 and 64; atīśāra 54–56; grahaṇī 4 and 13; arśas 100–103 and 133–141; krimi 5; pāṇḍuroga 35–40; nāḍivraṇa 5), Rāmādeva⁵¹¹ (nāḍivraṇa 16), Rāmapālādeva⁵¹² (kuṣṭha 74–82), Rāmbharāma (vātavyādhi 227–271),⁵¹³ *Rasasāgara* (prameha 44),⁵¹⁴ *Rasāyanavaidya*⁵¹⁵ (atīśāra 21–22),⁵¹⁶ *Ratnamālā* (atīśāra 30; raktapitta 39–42; rājayakṣman 65–66),⁵¹⁷ *Ratnaparīkṣāśāstra*⁵¹⁸ (vātavyādhi 3–5), *Ratnasāra*⁵¹⁹ (arśas 180),⁵²⁰ Ravi⁵²¹ (jvara 106, 115, 117, 119–121, 157–158, 161), Ravigupta (jvara 64, 69, 71, 82, 84, 87, 99, 100–102, 104, 124, 149, 150, 185–186; atīśāra 67; grahaṇī 9–11, 20–21, 47–49; krimi 4; pāṇḍuroga 9; raktapitta 22–24, 25, 35–37; rājayakṣman 1–2, 9–12, 22–23, 24–25, 27, 47–60, 75; kāsa 5–6, 37–38, 49, 59–64; hikkāśvāsa 1),⁵²² 6–8, 17; chardi 2–3, 6–11, 13, 19, 27; trṣṇā 10–11, 16, 17, 24; madātyaya 3–6 and 24; unmāda 1–2, 15–16, 29–30, 44–45; apasmāra 3–4; ūrustambha 1–2; āmavāta 35–37; udāvarta 31; gulma 57–59 and 92; mūtrakṛcchra 9 and 19; āsmarī 32; prameha 18, 19, 20, 21; udara 41 and 45; plīhayakṛt 6; śoṭha 20 and 22; vraṇaśoṭha 65–66; bhagandara 3 and 22; upadāṃśa 9; kuṣṭha 2, 35, 55, 64, 68, 92, 120–121, 156; visarpa 5 and 7; mukharoga 52 and 73–74; karṇaroga 15; nāsāroga 5 and 21; netraroga 15, 16, 22, 31; nasya 1), *Rugviniścaya*⁵²³ (jvara 187; madātyaya 21–22; udara 55–56; plīhayakṛt 1; vṛddhi 22; vraṇaśoṭha 48; nāḍivraṇa 1; bhagna 1; kṣudraroga 2), *Rūparatnākara*⁵²⁴ (mukharoga 32–33), *Śabdārṇava*⁵²⁵ (vātavyādhi 106–116 and 227–271; āmavāta 22; vraṇaśoṭha 76–80; nāḍivraṇa 6), *Śaivasiddhānta*⁵²⁶ (rasāyana 167–189),⁵²⁷ *Śaivatantra*⁵²⁸ (rasāyana 166),⁵²⁹ *śālākya*⁵³⁰ (nasya 8–10),⁵³¹ *Śālākyaatantra*⁵³² (rājayakṣman 40–46),⁵³³ Śālihotra (vātavyādhi 96–105; āmavāta 7),⁵³⁵ Śambhu⁵³⁶ (kuṣṭha 52),⁵³⁷ *Samgraha*⁵³⁸ (grahaṇī 77–85; pāṇḍuroga 19–20; raktapitta 35–37; gulma 83–87; hṛdroga 25; prameha 18 and 22–26; vidradhi 8; nāḍivraṇa 16; upadāṃśa 1–2; visarpa 14; kṣudraroga 1, 35–37, 66–71; mukharoga 20, 27, 32–33),⁵³⁹ samgrahakārāḥ (jvara 291; kuṣṭha 131–133), Samgrahakṛt (jvara 284; śoṭha 48–51; ślīpada 7; kuṣṭha 134–135; kṣudraroga 96),⁵⁴⁰ samgrahakṛtāḥ⁵⁴¹ (kṣudraroga 24–25 and 98; mukharoga 27), *Samgrahāntara* (udarda 3 and 15; amlapitta 1), samgrahavyākhyātāraḥ,⁵⁴² (vidradhi 8) *Samkarabhāṣitalohakalpa*⁵⁴³ (kuṣṭha 17),⁵⁴⁴ *Samyogasvabhāva*⁵⁴⁵ (jvara 244–246),⁵⁴⁶ Sanātana⁵⁴⁷ (agnimāndya 11–12 and 14–15; śūla 50–51; gulma 46), Sanātana's *Vallabhā* (arśas 147–151; agnimāndya 11–12), Sandhyākara⁵⁴⁸ (rājayakṣman 40–46), *Sārāvalī*⁵⁴⁹ (jvara 2), *Sāroccaya*⁵⁵⁰ (arśas 147–151),⁵⁵¹ Śaunaka (jvara 64 and 65–68; arśas 159–164), *Siddhasāra*⁵⁵² (jvarātīśāra 1–2; atīśāra 98 and

102; arśas 4–7),⁵⁵³ pāṇḍuroga 8, 25, 26, 30; rājayakṣman 47–60; hikkāśvāsa 6–8; madātyaya 10; apasmāra 3–4; vātavyādhi 140 and 175–179; udāvarta 6; gulma 31–32; udara 16 and 58; plīhayakṛt 8 and 9; vraṇaśoṭha 50, 85, 90; nāḍivraṇa 1; upadāṃśa 1–2; visarpa 14, 19, 33; kṣudraroga 32 and 99; mukharoga 11 and 52; rasāyana 167–189; vamaṇa 6; vireka 2, 10–15, 16; nasya 12), *Siddhayoga*⁵⁵⁴ (jvara 3; jvarātīśāra 1–2; prameha 30–37; netraroga 18), Somadāsa's *Karmamālā*⁵⁵⁵ (agnimāndya 11–12),⁵⁵⁶ Śrīdharapātāñjala(gaṇita)śāstra (jvara 65–68),⁵⁵⁷ Śrīkaṇṭha (karṇaroga 30),⁵⁵⁸ Śrīkaṇṭha's *Amṛtavallī*⁵⁵⁹ (amlapitta 1), *Śubha*⁵⁶⁰ (mukharoga 53), Śubhamkara⁵⁶¹ (vraṇaśoṭha 56–57; kṣudraroga 81–82), Sudāntasena (pāṇḍuroga 9; rājayakṣman 9–12; chardi 27; madātyaya 11–12; mukharoga 73–74; sneha 13–14), *Sūdasāstra*⁵⁶² (jvara 31–32 and 44; rājayakṣman 13–15; madātyaya 15; āmavāta 61–65; vamaṇa 14),⁵⁶³ *Sukatantra*⁵⁶⁴ (jvara 2),⁵⁶⁵ Suśruta (passim), suśrutapāṭhānuvādināḥ (kṣudraroga 1), Suvīra⁵⁶⁶ (vraṇaśoṭha 99), *Svalpavāgbhaṭa* (pāṇḍuroga 35–40; prameha 30–37 and 47–49; śoṭha 48–51; kuṣṭha 131–133; mukharoga 41 and 71; karṇaroga 16 and 23–24), Svāmīdāsa⁵⁶⁷ (jvara 5), *Svarasāyana*⁵⁶⁸ (āmavāta 29–34),⁵⁶⁹ *Tantra* (karṇaroga 38), *tantrāntara* (jvara 5, 8–9, 34, 49, 64, 124, 150; arśas 18–22, 100–103, 153–158; agnimāndya 90–91; krimi 10; pāṇḍuroga 11; raktapitta 39–42 and 66–73; kāsa 59–64 and 65–68; chardi 1; unmāda 21–28; apasmāra 7–8; vātavyādhi 227–271; vātarakta 13; āmavāta 15–18 and 23–28; pariṇāmaśūla 21–22 and 75–76; gulma 71–72; udara 1, 16, 58; plīhayakṛt 26–29; śoṭha 8, 33–34, 48–51; vraṇaśoṭha 49, 76–80, 91–92; nāḍivraṇa 16; kuṣṭha 57, 63, 74–82, 131–133, 134–135; amlapitta 23–24; visarpa 2 and 33; kṣudraroga 23, 35–37, 66–71, 96; mukharoga 8, 20, 51, 58cd; karṇaroga 41; nāsāroga 29–31; netraroga 6; rasāyana 160, 166, 190–195; vṛṣya 15–25⁵⁷² and 50–51; sneha 13–14 and 21–22; vireka 28; anuvāsana 24–25; nirūha 13, 22–25,⁵⁷⁴ 26–27, 28–30,⁵⁷⁵ 31),⁵⁷⁶ *Tantrapradīpa*⁵⁷⁷ (pariṇāmaśūla 54; mukharoga 16 and 17), *Tattvakalika*⁵⁷⁸ (vraṇaśoṭha 46, 54, 56–57; vṛṣya 55),⁵⁷⁹ *ṭīkākāra* (visarpa 2), *ṭīkākāraḥ* (bhagna 16–27), *ṭīkākr̥t* (rājayakṣman 61–63), *ṭīkākr̥tāḥ* (jvara 17; grahaṇī 72–76; raktapitta 34; hikkāśvāsa 19–20; trṣṇā 10–11), *Ṭippanī* (kuṣṭha 41),⁵⁸⁰ Tīsaṭa⁵⁸¹ (jvara 3 and 19; vidradhi 15; visarpa 34; masūrīkā 24), Trilocanadāsa (vātavyādhi 150–154),⁵⁸² udīcyāḥ⁵⁸³ (anuvāsana 33),⁵⁸⁴ Ugrasena⁵⁸⁵ (nāḍivraṇa 5),⁵⁸⁶ *Ujjvalakoṣa*⁵⁸⁷ (vātavyādhi 3–5), Umāpati⁵⁸⁸ (āmavāta 29–34), *Uttarakārikā* (vamaṇa 16; anuvāsana 33),⁵⁸⁹ Vāgbhaṭa (passim), Vāgbhaṭa's *Svalpasamhitā*⁵⁹⁰ (kāsa 30–31), *Vaidyakapradīpasamgraha* (jvara 3),⁵⁹¹ *Vaidyapradīpa*⁵⁹² (jvara 48; jvarātīśāra 1–2 and 16–25; atīśāra 30, 77 and 93–94; grahaṇī 5–6, 7, 29–36, 77–85; arśas 4–7 and 152; krimi 12; kāsa 30–31; hikkāśvāsa, intr.; trṣṇā 1 and 10–11; kuṣṭha 17; visarpa 41–42; kṣudraroga 104–106; mukharoga 113–117; karṇaroga 16 and 38; nāsāroga 1; netraroga 20; vṛṣya 50–51 and 56; anuvāsana 14–18), *Vaidya(pra)śāra* (rājayakṣman 40–46; kuṣṭha 116–119),⁵⁹⁴ *Vaidyaprasāra*⁵⁹⁵ (jvara 133, 247–252, 253–254, 256–257; atīśāra 64; grahaṇī 20–21; arśas 111–114; rājayakṣman 9–12; āmavāta 35–37; śūla 50–51; gulma 57–59; hṛdroga 26–29; prameha 44; vṛddhi 27–30; kuṣṭha 17, 74–82, 104–110, 116–119, 131–133, 144–147; kṣudraroga 60–62, 66–71, 72–75; mukharoga 11, 73–74, 113–117; karṇaroga 23–24; nāsāroga 2–3; vṛṣya 15–25; nirūha 26–27), vaiṣṇavāḥ (anuvāsana 33),⁵⁹⁶ Vaitaraṇa (āsmarī 47–49; bhagna 16–27; kuṣṭha 63; mukharoga 46–47; nirūha 28–30), Vallabha (vṛṣya 38–44),⁵⁹⁷ *Vallabha*⁵⁹⁸ (jvara

84; agnimāndya 12–13 and 14–15; krimi 4; pāṇḍuroga 9; raktapitta 66–73; gulma 47; prameha 17; vṛṇaśoṭha 75), *Vaṅgadesīya Gandhaśāstra*⁵⁹⁹ (vātavyādhi 227–271),⁶⁰⁰ *Vaṅgasena (ānavāta 29–34)*, *Vāpyacandra*⁶⁰¹ (jvara 10–11; atisāra 60; agnimāndya 77; mūrchā 11–12; gulma 91; sthauḷya 29; udara 51; bhagandara 5; kuṣṭha 8–12), *Varāhamihira (jvara 64 and 292)*,⁶⁰² *Vararuci (raktapitta 82–96)*,⁶⁰³ *Vasiṣṭha (kāsa 59–64)*,⁶⁰⁴ *Vedavākya (raktapitta 82–96)*, *Vibhākarapādāḥ*⁶⁰⁵ (arśas 165–171),⁶⁰⁶ *vātavyādhi 205–226*; prameha 44), *Videha (jvara 1, 20, 178–179, 277–278; jvarā-tisāra 1–2; grahaṇī 20–21; kāsa 43; vātavyādhi 87 and 180–184; plīhayakṛt 19–23; kṣudraroga 7, 12, 15, 49, 58–59, 66–71, 81–82, 83, 84–95, 93, 96, 98, 112, 126–133; mukharoga 11, 25–26, 32–33, 43, 68, 69, 70, 89, 97–98; karṇaroga 8–9, 11–12, 13, 16, 23–24, 30, 33–34, 36, 43, 49; nāsāroga 2 and 7–8)*,⁶⁰⁷ *Vijayarakṣita (intr. verses)*, *Vikramādityadeva*⁶⁰⁸ (arśas 83–92), *Vimāna (jvara 18)*,⁶⁰⁹ *vīravarmāṇaḥ*⁶¹⁰ (anuvāsana 33),⁶¹¹ *Viṣṇupurāṇa (vṛṣya 15–25)*, *Viṣṇuvarman*⁶¹² (udara 51), *Viśvā-mitra (arśas 142–146; gulma 57–59; kṣudraroga 126–133)*, *Viśvasāra*⁶¹³ (galagaṇḍa 19),⁶¹⁴ *Viśvavallabhā*⁶¹⁵ (kuṣṭha 159), *Vṛddhakāśyapa*⁶¹⁶ (hikkāśvāsa 19–20; udara 31–38), *Vṛddhasaṃhitā (jvara 292)*,⁶¹⁷ *Vṛddhasūruta (vātavyādhi 3–5; śūla 1 and 59–60; gulma 17; sneha 13–14)*, *Vṛddhavāgbhāṭa (jvara 3, 211, 237–238, 272–274, 277–278, 288–290, 291; arśas 127–131; pāṇḍuroga 4–6, 11, 12–18; rājayakṣman 47–60; vātavyādhi 3–5, 13–15, 36, 70, 81–85, 95, 138–139, 140; vātarakta 14; gulma 9–10, 41–42, 50–56, 57–59; mūtrāghāta 3; āsmari 50–53; prameha 6–7, 15, 16, 18, 19, 20, 30–37, 47–49; udara 27–30 and 45; śoṭha 38–39 and 40–51; vṛddhi 23; vṛṇaśoṭha 99; mukharoga 113–117)*, *vṛddha(vaidya)(vyavahāra) (jvara 20; grahaṇī 72–76; arśas 14 and 83–92; pāṇḍuroga 11; raktapitta 7 and 15; kāsa 10–15 and 59–64; hikkāśvāsa 19–20, 24–29, 30–33; svarabheda 6; tṛṣṇā 23; apasmāra 23–28; vātavyādhi 27, 62–63, 74–75, 87, 106–116, 205–206, 227–271; ānavāta 29–34 and 35–37; śūla 50–51; pariṇāmaśūla 21–22, 26–28, 32–35, 75–76; gulma 47; hr̥droga 10; mūtrāghāta 15; āsmari 37–38; prameha 44; udara 48; plīhayakṛt 2; vṛṇaśoṭha 98; nāḍivṛṇa 8; kuṣṭha 46, 55, 74–82, 111–115, 116–119; udarda 2; kṣudraroga 92 and 121; karṇaroga 30; sneha 15–16; vireka 16; anuvāsana 5 and 24–25; nirūha 4–6, 20–21, 26–27, 31), *Vṛddhavideha*⁶¹⁸ (vātavyādhi 162–170), *Vṛnda*⁶¹⁹ (jvara 3, 64, 65–68, 116, 162–164, 178–179, 235; jvarātisāra 26–27; atisāra 54–56; grahaṇī 14–15 and 72–76; raktapitta 39–42; rājayakṣman 13–15 and 65–66; hikkāśvāsa 24–29 and 30–33; svarabheda 13; madātyaya 21–22; unmāda 7 and 31–33; vātavyādhi 3–5, 88–92, 1400; vātarakta 13, 21–23, 41; ānavāta 9 and 35–37; śūla 50–51; udāvarta 25; mūtrāghāta 1; āsmari 13–16; prameha 16; sthauḷya 5; udara 1, 48, 55–56; śoṭha 8 and 48–51; vṛddhi 22; ślīpāda 24–30; vṛṇaśoṭha 48, 59, 65–66, 68; nāḍivṛṇa 1, 3, 22; bhagandara 6, 13–17, 23; upadamaśa 4, 5, 11, 13; bhagna 10, 11, 14–15, 16–27; kuṣṭha 2, 8–12, 24, 91, 111–115, 134–135, 150, 160–161; udarda 7; amlapitta 1, 12, 20, 23–24; visarpa 3–4; masūrīkā 5, 7, 39; kṣudraroga 2, 10, 16, 20, 21–22, 23, 31, 35–37, 66–71, 81–82, 117–120; mukharoga 1, 9, 15, 32–33, 48, 52, 53, 54, 82, 96; karṇaroga 18–22, 23–24, 28, 30, 33–34, 38, 57, 59, 61; nāsāroga 17, 22, 28; netraroga 2, 14, 20; vṛṣya 15–25; sneha 2 and 8–10; vamaṇa 9; anuvāsana 5, 24–25, 35; nirūha 22–25), *Vṛndakuṇḍa*⁶²⁰ (jvara 20, 65–68, 199–200, 235; arśas 147–151; vātavyādhi 227–271), *Vṛndakuṇḍa's Siddhayoga (jvara 3)*, *Vṛndasaṃgraha (jvara 175–177; agnimāndya 5; unmāda 21–28;**

udara 59–62; visarpa 30; netraroga 19), *Vṛndaṭippaṇī (raktapitta 39–42; karṇaroga 30)*, *Vyāḍi*⁶²¹ (rājayakṣman 28–29), *Vyagradaridraśubhaṃkara*⁶²² (vṛṇaśoṭha 46, 48, 55; bhagandara 10; upadamaśa 10; bhagna 10 and 11; kuṣṭha 63), *Vyāsa*⁶²³ (rājayakṣman 24–25),⁶²⁴ *Yogamālā*,⁶²⁵ *Yogamañjarī*⁶²⁶ (jvara 2; netraroga 36), *Yogapañcāśikā*⁶²⁷ (hikkāśvāsa 11–14),⁶²⁸ *Yogaratanākara*⁶²⁹ (jvara 2 and 32; grahaṇī 93–99; arśas 76–82 and 180;⁶³⁰ prameha 44),⁶³¹ *Yogaratanasamuccaya*⁶³² (atisāra 67;⁶³³ kāsa 65–68),⁶³⁴ *Yogaratanasārasamuccaya*⁶³⁵ (jvara 237–238),⁶³⁶ *Yogaśata*⁶³⁷ (jvara 1, 141, 277–278; arśas 63–75 and 147–151; agnimāndya 11–12; hikkāśvāsa 9 and 15; chardi 27; vātarakta 6; śūla 50–51 and 54; gulma 40 and 46; mūtrakṣcchra 7 and 24; āsmari 32; prameha 17; udara 50; kuṣṭha 20; mukharoga 73–74; netraroga 29), *Yogaśataṭikā (raktapitta 66–73)*,⁶³⁸ *Yogaśataṭikākāra (gulma 46)*,⁶³⁹ and *Yogayukti*⁶⁴⁰ (jvara 170; grahaṇī 7; krimi 12; raktapitta 66–73; kāsa 65–68; hikkāśvāsa 24–29; madātyaya 17–19; ānavāta 8; ślīpāda 16; vṛṇaśoṭha 1–2; sveda 16–17).⁶⁴¹

Sources mentioned in D.Ch. Bhattacharyya's article and not found in the edited text are: *Amṛtasāra*,⁶⁴² *Bhīṣagyaṅgi*,⁶⁴³ *Dhanurveda*,⁶⁴³ *Vaidyasāra*, *Loharasāyana*, *Nandanacanda*, and *Vikramaparākrama*.⁶⁴⁴

Nīścala and his *Ratnaprabhā* are quoted by Āḍhamallā,⁶⁴⁵ the glossator on the *Rasaratnākara*, Gopālādāsa in his *Cikitsāmr̥ta*,⁶⁴⁶ Govindasena in the comments on his *Paribhāṣāpradīpa*, Jīvanānandavidyāsāgara in his commentary on the *Rasendrasārasaṃgraha*, and Śivādāsasena in his commentaries on the *Cakradatta* and the *Uttarasthāna of the Aṣṭāṅghṛdayasaṃhitā*.

The author mentions his name, Nīścalakara, in the introductory verses of his commentary, which also acquaint us with the names of his parents, Lakṣmī and Sadānandakara. He obviously belonged to the Kara family of physicians, known as one of the lines of Bengali vaidyas from Bharatamallika's *Candraṭiprabhā*. Evidence found in the *Ratnaprabhā* suggests that he belonged to the part of Bengal called Rāḍha or Rāḍhā.⁶⁴⁷

D.Ch. Bhattacharyya pointed to a detail in the formula of pāṇīyavaṭikā⁶⁴⁸ that might also confirm Nīścala's Bengal origin. The author of this prescription recommends, before taking these pills, the worship of Karuṇādhāra and Khasarpaṇa.⁶⁴⁹ Khasarpaṇa, a manifestation of Lokanātha,⁶⁵⁰ was revealed to an upāsaka called Śubhaṃkara in a village of the name Khasarpaṇa, situated in the Khāḍī maṇḍala of Bengal.⁶⁵¹

Nīścala is described as a court physician in charge of the women's departments (antahpuravaidya) and as a mahāmahopādhyāya in the colophon of the chapter on jvara. His position as a royal physician is confirmed by the functions held by some of his patients. The identity of the king who was his patron depends on his date.

The maṅgala of the *Ratnaprabhā* indicates that he was a Śaiva.

Nīścala wrote another medical treatise before he began work on the *Ratnaprabhā*.⁶⁵²

Nīścala's floruit depends on several disputed clues. One of these is the identity of his teacher. D.Ch. Bhattacharyya considered Vijayarakṣita to have been Nīścala's guru. P.V. Sharma, being convinced that he cannot possibly have been Vijayarakṣita,

advanced the thesis that this teacher belonged to Vijayarakṣita's tradition, but lived about three quarters of a century later.

D.Ch. Bhattacharyya⁶⁵³ assumed Nīścala's instructor to have been a pupil of Vijayarakṣita on the basis of the introductory verses of the *Ratnaprabhā*, which state that Nīścala started writing his commentary after the passing away of Vijayarakṣita; Nīścala adds that the disappearance of Vijayarakṣita resulted in an improper interpretation (kubodha) of the *Cakradatta*, which deplorable state of affairs he intends to remedy by the composition of his commentary.⁶⁵⁴

P.V. Sharma claims that the reference to Vijayarakṣita as an āyurvedaguru does not necessarily imply that he was Nīścala's instructor in āyurveda, but may indicate that Vijayarakṣita was honourably remembered as a medical authority. In this he may be right. He adds that it is unusual for Indian authors to mention the name of their teacher; this is, however, not a hard rule.⁶⁵⁵ Nīścala's statement that the light of the proper elucidation of the *Cakradatta* had become dull after Vijayarakṣita's death points, according to P.V. Sharma, to a long interval of time between Vijayarakṣita and Nīścalakara. This long period was also necessary, in P.V. Sharma's eyes, for the *Cakradatta* to supersede the *Siddhayoga* in popularity to such a degree that a commentary was written on the former treatise.⁶⁵⁶

The first argument cannot be regarded as persuasive. The second argument disagrees with the first one, because Vijayarakṣita did comment, at least orally, on the *Cakradatta*, while his pupil Śrīkaṇṭhadatta wrote, somewhat later, his *Kuṣumāvalī* on the *Siddhayoga*. Moreover, P.V. Sharma himself surmises that Śrīkaṇṭhadatta also wrote a commentary on Cakra's *Cikitsāsamgraha*.⁶⁵⁷

The *Ratnaprabhā* quotes both Rakṣita and a guru, as well as a book written by the guru and this guru's tradition.

The quotations from Rakṣita, usually reverentially called Rakṣitapādāḥ, are partly very close to or identical with remarks found in Śrīkaṇṭhadatta's *Kuṣumāvalī* on the *Siddhayoga*; another part may derive from his comments on the *Cakradatta*. It cannot be excluded that his interpretations of verses common to *Siddhayoga* and *Cakradatta* are from his explanations concerning the latter work. However that may be, it can confidently be taken for granted that he was well acquainted with both *Siddhayoga* and *Cakradatta*.

An examination of the quotations from Nīścala's guru, often respectfully called gurupādāḥ, confronts us with a remarkably similar situation. These citations are partly almost identical with passages of the *Kuṣumāvalī*;⁶⁵⁸ another part are not found there, being concerned with verses of the *Cakradatta* that were not taken from the *Siddhayoga*.⁶⁵⁹ The quotations from the guruparamparā and gurusampradāya are of a different character, being not found at all or not literally, in the *Kuṣumāvalī*.⁶⁶⁰ Those from the *Gurugrantha*, in prose, are absent from the *Kuṣumāvalī*.

This body of data does not establish that Vijayarakṣita was Nīścala's teacher, but suggests that there are no cogent reasons to claim that Nīścalakara lived a long time after Vijayarakṣita. Nīścala's intimate knowledge of Vijayarakṣita's interpretations of *Siddhayoga* and *Cakradatta*, probably not laid down in a complete commentary,⁶⁶¹ is rather indicative of a not too long interval between Vijayarakṣita's decease and Nī-

ścala's literary activity. The detailed acquaintance with Cakrapāṇi's sources, displayed by Nīścala, corroborates this view, because this type of information must have been supplied to him by someone not far removed in time from the compilation of the *Cakradatta*, unless it was found in an earlier commentary.

Commentators on the *Cakradatta* who preceded Nīścala are referred to in the *Ratnaprabhā*.⁶⁶²

A remarkable feature of the *Ratnaprabhā* is the absence of quotations from Śrīkaṇṭhadatta's *Kuṣumāvalī* on the *Siddhayoga*, a work with which Nīścala must have been well acquainted, if he is later than this pupil of Vijayarakṣita. The Śrīkaṇṭha to whom Nīścala refers appears to be a different author, in spite of P.V. Sharma's assertion to the contrary.⁶⁶³ D.Ch. Bhattacharyya regarded Śrīkaṇṭhadatta as a contemporary of Nīścala.⁶⁶⁴

P.V. Sharma's thesis that a long period of time separates Nīścala from Cakrapāṇidatta is in his own opinion confirmed by Nīścala's adverse criticism of Cakra's pupils (cakraśiṣyāḥ),⁶⁶⁵ although this connection between criticism and the passage of time is not self-evident at all. Apart from this, I cannot endorse the claim that Nīścala rejects the views advanced by these pupils, which are quoted from some unidentified work in verse. In addition, the citation adduced to prove Nīścala's critical attitude⁶⁶⁶ is the only one occurring in the *Ratnaprabhā* that lends itself to different interpretations; the context of the remaining two is neutral in tone.⁶⁶⁷

The date P.V. Sharma proposes for Nīścala is A.D. 1275.⁶⁶⁸ This late dating is connected with his chronological scheme for a number of authors quoted in the *Ratnaprabhā*; he assigns Vaṅgasena to A.D. 1200, Indu to A.D. 1225, and the Mādhava who wrote the *Dravyagūṇa* to A.D. 1250.

The single quotation from Vaṅgasena's *Samgraha*⁶⁶⁹ has not been traced in this author's *Cikitsāsārasamgraha*.⁶⁷⁰ The supposition that Nīścala consulted a MS of Vaṅgasena's treatise that contained the formula cited does not imply that Nīścala is later than A.D. 1200, since P.V. Sharma's date of Vaṅgasena was reached on insufficient grounds; Vaṅgasena was already known to Ḍaḷhaṇa, which pushes the former's date back to the twelfth century.⁶⁷¹ The quotations from Indu are unsuitable to chronological purposes, because Indu's date depends on that of Nīścala.⁶⁷² The *Mādhavadravyagūṇa* is in my opinion earlier than P.V. Sharma supposes it to be.⁶⁷³

P.V. Sharma also claims that Nīścala quotes Ḍaḷhaṇa anonymously and follows his views in the interpretations of drugs.⁶⁷⁴ Unfortunately, P.V. Sharma refers, in order to prove his point, to parts of the *Ratnaprabhā* that have not been preserved,⁶⁷⁵ which precludes verification of his claim. Moreover, anonymous quotations from Ḍaḷhaṇa's *Nibandhasamgraha* may be from one of Ḍaḷhaṇa's sources, such as the commentaries of Jejjāta, Gayadāsa and Cakrapāṇidatta.⁶⁷⁶ However that may be, the hypothesis that Ḍaḷhaṇa was one of Nīścala's sources does not conflict with an earlier date of Nīścala than the one proposed by P.V. Sharma; Ḍaḷhaṇa lived in the latter half of the twelfth century, or even in its first half if P.V. Sharma is right in assigning him to about A.D. 1150.⁶⁷⁷

A problem is raised by P.V. Sharma's discovery that an anonymous quotation found in the *Ratnaprabhā* is identical with two verses of the *Gūṇasamgraha* of the

Soḍhalanighaṇṭu,⁶⁷⁸ a work usually placed about A.D. 1200.⁶⁷⁹ This quotation may, however, be from one of Soḍhala's sources.

The dates of some other authors and works quoted in the *Ratnaprabhā* do not conflict with placing Niścāla in the latter half of the twelfth century. The identification of Dharaṇīdhara as Dharaṇīdāsa, the author of the *Anekārthasāra*, poses no problems, because Dharaṇīdāsa lived in the early twelfth century.⁶⁸⁰ The two quotations from the *Hārāvalī*, which are on the same subject, could not be traced in Puruṣottama's *Hārāvalī* by D.Ch. Bhattacharyya. Even their presence in Niścāla's copy of the lexicon would not invalidate an earlier date of Niścāla, since Puruṣottama lived in the first half of the twelfth century.⁶⁸¹

A disputed piece of evidence concerning Niścāla's date is his reference to king Rāmapāla of Bengal.⁶⁸² Niścāla describes an audience given by this king to the king of Kāmarūpa. D.Ch. Bhattacharyya, the earliest author to draw attention to this passage,⁶⁸³ was convinced that the vivid and flowery depiction of this event, in combination with the panegyric epithets applied to Rāmapāla, prove that this king was still alive when Niścāla wrote his commentary, which would place the latter in the first quarter of the twelfth century.⁶⁸⁴ P.V. Sharma⁶⁸⁵ disagrees with D.Ch. Bhattacharyya; he argues that Rāmapāla's name would have appeared in the introductory verses of the *Ratnaprabhā*, if he had been Niścāla's patron, as D.Ch. Bhattacharyya asserts. Moreover, Niścāla is not mentioned as a member of Rāmapāla's medical staff; the name of the chief physician of the king was Bhadreśvara. P.V. Sharma suggests that the information concerning the meeting of Rāmapāla with the king of Kāmarūpa may have reached Niścāla through the traditions centering round the impressive figure of Rāmapāla, who took great interest in the development of academic institutions and founded the Mahāvihāra of Jagaddala in North Bengal.⁶⁸⁶ P.V. Sharma's argumentation does not carry conviction in my eyes, because the style of Niścāla's account of the audience shows that it was still a lively memory to the one who reported about it. Niścāla may well have met someone who was present on the occasion, if he lived in the second half of the twelfth century.

The Buddhist elements in the *Ratnaprabhā* have also been used as clues to Niścāla's chronological position. These elements consist of: references to Buddhist texts, such as the *Amoghajñānatantra* and *Bodhicaryāvatāra*,⁶⁸⁷ a Buddhist author like Dharmakīrti,⁶⁸⁸ Buddhist deities like Khasarpaṇa, Lokanātha⁶⁸⁹ and Tārā.⁶⁹⁰ These references made D.Ch. Bhattacharyya⁶⁹¹ claim that Niścāla undoubtedly flourished at a time when Buddhism was still reigning supreme in Bengal, and certainly before the Muslim armies destroyed the Buddhist universities of Bihār, which would place him in the last quarter of the twelfth century at the latest. P.V. Sharma rejects D.Ch. Bhattacharyya's arguments and emphasizes that Buddhist culture remained conspicuously present in Bengal until A.D. 1350. He says that, though Muḥammad Bakhtiyār (he probably means Ikhtiyār-ud-Dīn Muḥammad, son of Bakhtiyār Khālījī) destroyed Odantapurī Vihāra⁶⁹² in 1199 and Vikramaśīla Vihāra⁶⁹³ in 1200, the Jagaddala Vihāra⁶⁹⁴ in northern Bengal, where Buddhist monks took refuge, continued for another one hundred and fifty years. He adds that Bengal and Bihār enjoyed again uninterrupted peace during the rule of Ghiyās-ud-Dīn Khālījī, and that Muslim rule

was not well established beyond Varendra till the foundation of the independent Bengal Sultanate under the house of Balban about one hundred years after the death of Ghiyās-ud-Dīn Khālījī.⁶⁹⁵

In my opinion, an accurate determination of Niścāla's date cannot be reached by help of the references to Buddhism.

Almost all the evidence available does not conflict with placing Niścāla in the second half of the twelfth century,⁶⁹⁶ which would also explain that he does not refer to Dalhaṇa and Soḍhala by name. The single piece of evidence that might invalidate the proposed date is the anonymous quotation agreeing with some verses of the *Soḍhalanighaṇṭu*. Crucial in this respect is the unresolved question of Soḍhala's sources.

One of the MSS of the *Cakradatta* with Niścālakara's commentary (CBORI XVI, 1, Nr. 63) contains an interpolated portion of text and commentary, which covers netraroga 38–158, and the chapters on śīroroga, strīroga, bālaroga, viṣa, rasādiśodhanamāraṇa, ṣoṇitasrāva, and doṣavivaraṇa. The text of the chapters on śīroroga, strīroga, bālaroga and viṣa largely agrees with the text of the *Cakradatta*; the text of netraroga 38–158, rasādiśodhanamāraṇa and ṣoṇitasrāva has almost in toto been drawn from the *Śāringadharasamhitā*, while a smaller part has been taken from Vaṅgasena and the *Yogarātnākara*. The chapter on doṣavivaraṇa has been borrowed from the *Yogarātnākara*.

The text of the commentary on those parts which were taken from the *Śāringadharasamhitā* is based on Ādhamalla's commentary on that treatise.

Sources quoted in the interpolated portion of the commentary are: Amitaprabhācārya, Bhāluki, Bheḍa, Bhoja, *Candraṭṭiyatantrāntara*, Caraka, *Carakottaratantara*, Dṛḍhabala, Jatūkarṇa, Jejjāta, Kāśyapa, Kṣārāpāṇi, *Nāgārjunabharṭṭantra*, Nimi, Puna-rvasu, *Siddhasāra*, Suśruta, Suśrutādhyaṇin, Vāgbhaṭa, Videha, *Vṛddhabhoja*, and *Vṛddhavāgbhaṭa*.⁶⁹⁷

Śivadāsaśena

Śivadāsaśena⁶⁹⁸ says that he wrote his *Tattvacandrikā*⁶⁹⁹ because the *Cakrasaṃgraha* had become obscured by the darkness of bad commentaries.⁷⁰⁰ It is, as the author himself states in the introductory and concluding verses, an abridged version of Niścālakara's *Ratnaprabhā*, from which difficult passages are left out, while interpretations are added which differ from those by Niścālakara. Although Śivadāsa left out a large number of Niścāla's references, numerous works and authors are still quoted in his work.

These authorities and works are: ādhunikāḥ (arśas 114), Aghorācārya (rasāyana 92–94),⁷⁰¹ Agniveśa (jvara 17–18 and 64; raktapitta 14; nirūha 8–10), *Agniveśasamhitā* (jvara 29), Amara (rasāyana 159–171), Amogha (rasāyana 79),⁷⁰² *Amṛtasāra* (arśas 169–176), *Amṛtavallī* (vṛṣya 9), Aruṇa(datta) (grahaṇī 32–34; tṛṣṇā 8; mūtrāghāta 3; sneha 10–11; svastha 4–5 and 26–29),⁷⁰³ *Āyurveda* (kṣudraroga 84–85), *Āyurvedasāra* (jvara 82, 133, 161, 232; atisāra 21; grahaṇī 9–11; arśas 96–99; raktapitta 66–73; mūtrāghāta 3; plīhayakṛt 33–47; śotha 44–46; galagaṇḍa 39; nāḍivraṇa 3; kuṣṭha 106–112 and 160), Bakula (jvara 117; śīroroga 51), Bhadra (jvara 55),⁷⁰⁴ *Bhaiṣajyaratnāvalī*,⁷⁰⁵ Bhāluki (jvara 157–158), *Bhānumatī* (vātavyādhi 59–64;

ānāha 10; vṛṇaśoṭha 8–9; anuvāsana 5; nirūha 20–23; kavala 4), Bhaṭṭārahariścandra (jvara 49),⁷⁰⁶ Bhaṭṭatraya (svastha 53), Bhavyadatta (arśas 27–28), Bhavyadattadeva (rasāyana 38–40), Bhela (jvara 55 and 182–183; vamaṇa 14–15), Bhoja (atisāra 21–22; udāvarta 17; gulma 83–87; aśmarī 48–54; galagaṇḍa 31; nirūha 21), Bhojarāja (rasāyana 77–78), Bindusāra (jvara 201; raktapitta 25; viṣa 5–6), Brahmadatta (aśmarī 2–4),⁷⁰⁷ Brahmadeva (śūkadoṣa 10),⁷⁰⁸ Bṛhaṭṭikā (svastha 53),⁷⁰⁹ Cakra (often), Cakrasaṃgraha (plīhayakṛt 6; rasāyana 196–201; svastha 53), Cakravākyā (i.e., the *Āyurvedadīpikā*) (mukharoga, kaṇṭhagatarogacikitsā 19–20), Candrakalāṭikākāra (atisāra 65),⁷¹⁰ Candrāta (jvara 71, 75, 178–179, 213, 282; jvarātisāra 18–20; grahaṇī 53–57; arśas 116–122; agnimāndya 2; pāṇḍuroga 32; raktapitta 17 and 29; arocaka 4; śūla 70 and 75–76; vidradhi 20; vṛṇaśoṭha 52; upadaṃśa 10; kuṣṭha 29 and 136–137; kṣudraroga 66–71; mukharoga, mukhagatarogacikitsā 25–27; netraroga 144–145; bālāroga 25–26; viṣa 8; vṛṣya 15–24; nirūha 23–26 and 29–31),⁷¹¹ Candrāta (in the *Vṛndatīkā*) (agnimāndya 87), Candrikā (arśas 138–142; galagaṇḍa 15 and 43; vṛṇaśoṭha 8), Candrikākāra (jvara 42), Caraka (often), Carakatattvapradīpikā (by Śivadāsasena) (jvara 256; sneha 1 and 7; vamaṇa 16 and 18), carakaṭikākṛtaḥ (atisāra 23–24; raktapitta 27; unmāda 5), Carakavyākhyā (nirūha 36), Ḍallaṇa (jvara 103 and 210; atisāra 80; agnimāndya 87; pāṇḍuroga 28; raktapitta 36; chardi 2; tṛṣṇā 2, 3, 7, 10; śūla 75–76; udāvarta 16; ānāha 10; gulma 11; hṛdroga 5 and 12; mūtrāghāta 2 and 3; strīroga 6 and 7; viṣa 11–12),⁷¹² Deśarāsāyanaṭīkā (rasāyana 126),⁷¹³ Dīpikā (vṛṇaśoṭha 32),⁷¹⁴ Dravyaguṇa (jvara 117), Dravyāvalī (kuṣṭha 160), Dṛḍhabala (jvara 149–150; arśas 129–137; yakṣman 65–66; sneha 6; anuvāsana 27, 33, 36, 41; nirūha 8–10, 11, 21), Gadādhara (rasāyana 172–193), gaudāḥ (gulma 11), gaudīyāḥ (vṛṣya 15–24), Gayadāsa (jvara 256; pāṇḍuroga 2; raktapitta 36; chardi 3; vātavyādhi 218–227; aśmarī 48–54; galagaṇḍa 25; netraroga 62), Gopurarakṣita (jvara 256), Guṇapāṭha (atisāra 10; chardi 19),⁷¹⁵ Hārāvalī (vṛṣya 26–36),⁷¹⁶ Hariścandra (jvara 4 and 23; agnimāndya 12; gulma 63–67),⁷¹⁷ Hārīta (jvara 5, 34, 49, 71, 118, 178–179, 218, 261; jvarātisāra 18–20; atisāra 58–60; agnimāndya 78; pāṇḍuroga 1 and 52; yakṣman 22–25; śūla 13–16; gulma 43–44; asṛgdara 2 and 8–11; rasāyana 152, 154–156, 160, 165–166, 196–201; vṛṣya 1; nirūha 27), Jatūkarna (jvara 4, 48, 124, 178–179, 198–199, 256; atisāra 61 and 77; grahaṇī 4 and 45–47; arśas 114; kāsa 12; apasmāra 31–32; vātavyādhi 190–194; vātarakta 42; prameha 28–29; kṣudraroga 127; karṇaroga 18–22; netraroga 15; rasāyana 196–201), Jejjāta (jvara 29, 42, 255; agnimāndya 30–38 and 74; raktapitta 17; yakṣman 47–60; tṛṣṇā 8; vātavyādhi 10 and 94; ānāha 10; mūtrāghāta 16; netraroga 59), Jīvanākhyā (rasāyana 81),⁷¹⁸ kāmāsāstra (vṛṣya 61), Kārikā (svastha 53), Kārttika (pāṇḍuroga 28; arocaka 2; tṛṣṇā 11; gulma 94; mūtrāghāta 3 and 4; bhagna 15–16), Kārttikakuṇḍa (mūtrāghāta 16), Kharanāda (jvara 49 and 261), Kṣṇātreya (jvara 64 and 256; yakṣman 40–46; chardi 17–18; unmāda 31–33; nasya 25–26), Kṣārāpāni (jvara 205–207; raktapitta 74–78; yakṣman 65–66; kāsa 13; hikkāśvāsa 19–20; gulma 98), Lauhasāstra (rasāyana 38–40 and 62), Lohapradīpa (pāṇḍu 9; rasāyana 67–72),⁷¹⁹ Mādhava (s *Nidānasamgraha*) (jvarātisāra 1), Mādhavakara (gulma 17),⁷²⁰ Mādhavakara (s *Dravyaguṇa*) (jvara 31; agnimāndya 5), Madhyavāgbhāta (karṇaroga 48),⁷²¹ Mahābhārata (jvara 239), Maheśvara (unmāda 6 and 29–30),⁷²² Maheśvarapatrikā (āmavāta 1; sthaulya 17), Medinīkārakośa

(netraroga 188),⁷²³ Nāgārjuna (agnimāndya 14; chardi 19; śūla 70; rasāyana 34, 76, 123–125, 126),⁷²⁴ Nāmamañjarī (rasāyana 54),⁷²⁵ Nidāna (galagaṇḍa 55), Nighaṇṭakāra (jvara 286),⁷²⁶ Nighaṇṭu (arśas 161–168; soṭha 10), Niścala⁷²⁷ (jvara 70, 103, 145; atisāra 40; arśas 18 and 113; agnimāndya 87 and 91; krimi 5; pāṇḍuroga 28; raktapitta 15; tṛṣṇā 22; madātyaya 13; dāha 7; vātavyādhi 71 and 156; ūrustambha 12; āmavāta 26; śūla 12–16; pariṇāmaśūla 14 and 15; gulma 11, 43–44, 74–75; prameha 20; udara 42–43; plīhayakṛt 6; soṭha 35–36; vṛṇaśoṭha 50; bhagandara 13–20; amlapitta 17 and 38–50; mukharoga, mukhagatarogacikitsā 2 and 15–16;⁷²⁸ karṇaroga 56; nāsāroga 1 and 2–3; netraroga 22, 87–89, 138–140, 212; śīroroga 2, 25, 49; strīroga 5; bālāroga 22 and 29–30; vṛṣya 11–13 and 26–36; sneha 21), Pālākāpya (svastha 21–24), Parameśvararakṣitādisamgraha (rasāyana 196–201),⁷²⁹ Parāśara (atisāra 102), Pātāñjali (rasāyana 45–47, 55–56, 76, 81, 122), Pātāñjali (rasāyana 52–53, 55–56, 61, 63–64, 67–72, 83–84, 107),⁷³⁰ Prayogaratnākara (jvara 31),⁷³¹ Puṣkalāvata (jvara 49), rasaśāstra,⁷³² Rasatarāṅgiṇī,⁷³³ Rasendrasārasamgraha,⁷³⁴ Ratnakōśa (aśmarī 37–38; plīhayakṛt 1),⁷³⁵ Ratnaprabhā⁷³⁶ (jvara 1; nāsāroga 9–10; rasāyana 172–193), Ravigupta (jvara 71; krimi 4),⁷³⁷ Rāvaṇoktakumāratantra (bālāroga 89),⁷³⁸ Rugviniścaya (vṛddhi 23; visarpa 42), Śabdārṇava (vātavyādhi 256–277),⁷³⁹ Śaivatantra (rasāyana 172–193), Śālākya (netraroga 12;⁷⁴⁰ dhūmapāna 6–7), Śālihotra (jvara 168–170), Samgraha (visarpa 30),⁷⁴¹ Samgrahakāra (gulma 46; hṛdroga 26),⁷⁴² samgrahakārāḥ (raktapitta 27; yakṣman 22–25), Samgrahakṛt (yonivyāpad 37–44),⁷⁴³ samgrahakṛtaḥ (strīroga 21–24), Siddhasāra (jvarātisāra 1 and 4; asṛgdara 8–11; bālāroga 81–82; nasya 12–13),⁷⁴⁴ Siddhayoga⁷⁴⁵ (svastha 53), Śrīkaṇṭha (jvara 258; tṛṣṇā 18; śūla 64–65; kuṣṭha 106–112; udara 10; masūrīkā 45–47; kṣudraroga 97; karṇaroga 55; netraroga 62, 110–112, 203; strīroga 13; bālāroga 29–30, Śrīkaṇṭhadatta (vātavyādhi 20–22; udāvarta 17),⁷⁴⁶ Sudānta (rasāyana 1), Sudāntasena (pāṇḍuroga 9), sūdasāstra (yakṣman 6–7; madātyaya 15; śīroroga 50; vamaṇa 16), Suśruta (often), suśrutatīkā (visarpa 5), suśrutatīkāḥ (bhagna 17–29), suśrutatīkāḥ (agnimāndya 88; krimi 5; ; tṛṣṇā 8; mūtrāghāta 5; galagaṇḍa 39), Svalpavāgbhāta (karṇaroga 11–13), Tantrapradīpa (rasāyana 172–193), Tantratīkā (svastha 53),⁷⁴⁷ Vaitaraṇa (vṛṇaśoṭha 10), Videha (plīhayakṛt 19–23; karṇaroga 8–9 and 16; netraroga 3, 16, 151–155; śīroroga 35), Vindhyaśāsin (kuṣṭha 17), Viśvāmītra (arśas 138–142 and 143–147; gulma 57–59; mūtrāghāta 3), Vṛddhakāśyapa (hikkāśvāsa 19–20), Vṛddhasuśruta (arśas 107–110; vātavyādhi 88–92), Vṛddhavāgbhāta (jvara 277; pāṇḍuroga 5 and 36–41; vātavyādhi 228–233; vātarakta 14; gulma 41–42; prameha 16; udara 29–32; vṛṇaśoṭha 23), Vṛnda⁷⁴⁸ (jvara 29, 103, 162–164, 202, 205–207; jvarātisāra 10–11 and 26–27; grahaṇī 19 and 40; arśas 143–146; krimi 12–14; raktapitta 39–42; yakṣman 65–66; hikkāśvāsa 24–29 and 30–33; vātavyādhi 71, 88–92, 95–99; vātarakta 13 and 23–25; āmavāta 21–23; aśmarī 10 and 13–16; prameha 31–38; plīhayakṛt 6; soṭha 10, 11, 47–50, 51–54; ślīpada 24–30; nāḍīvrāṇa 3; kuṣṭha 152 and 158; amlapitta 17; visarpa 42; mukharoga, dantamūlarogacikitsā 23–24; netraroga 114; strīroga 25–27; viṣa 1; vṛṣya 15–24; anuvāsana 5; nirūha 23–26; svastha 53), Vṛndasamgraha (udara 61–64), Vṛndatippaṇī or -tippaṇīkā (raktapitta 27 and 36; yakṣman 10 and 27; kāsa 5–7; arocaka 2; chardi 12; dāha 7; ūrustambha 12; āmavāta 26; udara 48; vṛṇaśoṭha 43 and 44),⁷⁴⁹ Yogaratnākara (grahaṇī 91–97; rasāyana 35, 38–40, 63–64, 67–72, 83–84,

89–90, 92–94, 107, 129–135), and *Yogarātnākaraśamuccaya* (rasāyana 62–72 and 96–97).⁷⁵⁰

Some⁷⁵¹ assert that Śivadāsa quotes the *Nāvaṇīta*.

The following among the above-mentioned sources are not referred to or quoted by Nīścala: Aghorācārya, Aruṇa(datta), Brahmadatta, Brahmadeva, *Candraṭīkā*, Ḍallaṇa, *Guṇapāṭha*, *Lohapradīpa*, Maheśvara, Medinī, *Parameśvararakṣitādisaṃgraha*, *Paṭaṇjali*, *Prayogarātnākara*, *Rasataraṅgiṇī*, *Rasendrasārasaṃgraha*, *Ratnaśoṣa*, and *Rāvanoktakumāratantra*.

The absence of some of these can easily be explained by the chronological gap between Nīścala and Śivadāśasena; Aruṇadatta, Ḍallaṇa and Medinī are later than the former. The reasons Nīścala may have had for not quoting Brahmadeva remain obscure.

Śivadāsa's commentary abounds in interesting observations.⁷⁵² Variant readings are frequently referred to. In general, this author pays much attention to the establishment of a correct text, by consulting manuscripts,⁷⁵³ pointing to wrong readings,⁷⁵⁴ verses to be rejected, etc.⁷⁵⁵ An important authority for the text of the *Aṣṭāṅghṛdaya* was Aruṇadatta; Nīścala was consulted for the text of the *Cakradatta*. Śivadāsa is more than once critical of Vṛnda⁷⁵⁶ and sometimes disagrees with Nīścala.⁷⁵⁷

Accurateness in the methods of preparing compound medicines is one of his concerns, as is the identity of medicinal substances.

Śivadāsa and the *Tattvacandrikākāra*, the *Tattvacandrikā* and the *Śivadāśavyākhyā* are quoted in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnaśamuccaya*. Śivadāsa and his *Cakraṭīkā* are quoted in Āsubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa*. A ṭīkā on the *Cakradatta*, probably Śivadāśasena's *Tattvacandrikā*, is quoted in Guṇarājśarmamiśra's *Viśikhānupraveśavijñāna* and Jīvanandavidyāśāra's commentary on the *Rasendrasārasaṃgraha*.

Śivadāśasena's commentary on Cakrapāṇi's *Dravyaguṇasaṃgraha*⁷⁵⁸ has no title.

The following authorities and works are quoted or referred to: *Agniveśatantra* (pāṇīya 31), Aruṇa (śāka 1.7; pāṇīya 31), asmadguru (pāṇīya 37), *Bhānumatī* (phala 13), Bhaṭṭārahariścandra (phala 1 and 7), Bhoja (phala 30; kṣīra 13; aikṣava 17; āhāravidhi 22), Brahmadeva (māṃsādi 2.36; śāka 1.14), Cakra (dhānya 1.40; māṃsādi 1.2 and 6; śāka 1.3, 42, 46; śāka 2.27; lavaṇādi 6, 15, 17, 20; phala 1, 5, 7, 9, 36; pāṇīya 25 and 29; aikṣavādi 17; kṛtāṇna 8), *Candrikā* (phala 10, 11, 13, 29, 36; pāṇīya 29; kṣīra 6 and 20), *Candrikākāra* (phala 1 and 6; aikṣavādi 3 and 9; kṛtāṇna 38), Caraka (often), *Carakatattvādīpikā* (pāṇīya 37; kṛtāṇna 9), Dalvaṇa, Ḍalvaṇa or Ḍallana (māṃsādi 1.18; śāka 1.42 and 44; śāka 2.27; lavaṇādi 7, 14, 17; pāṇīya 23; aikṣavādi 9 and 12; madyādi 1; kṛtāṇna 54; bhakṣya 4; āhāravidhi 10),⁷⁵⁹ Dhanvantari (dhānya 8), Gayadāsa (dhānya 27–28, 32, 39; māṃsādi 1.22; pāṇīya 30), Hārīta (māṃsādi 2.34; pāṇīya 3; kṣīra 46; āhāravidhi 21), Jatūkarna (dhānya 10; māṃsādi 2.34; pāṇīya 2 and 37), Jejjāḍa (pāṇīya 25; kṣīra 37; madyādi 5; kṛtāṇna 38), Mādhava (dhānya 10; śāka 1.39; kṛtāṇna 8), Mādhavakara (māṃsādi 2.16), Nala (kṛtāṇna 48), *Nibandhasaṃgraha* (śāka 1.8, 42, 46; śāka 2.20; lavaṇādi 6),⁷⁶⁰ Parāśara (māṃsādi 2.34), Puruṣottama (phala 15), *Siddhānta* (dhānya 10), Suśruta (often), *tantrāntara* (dhānya 10 and 11), Trivikrama

(māṃsādi 1.18; śāka 1.44), Vāgbhaṭa (often), Vāpyacandra (māṃsādi 1.6): Viśvāmītra (dhānya 11; pāṇīya 22; āhāravidhi 22), *Vṛddhavāgbhaṭa* (śāka 1.3; pāṇīya 33). G.P. Sharma and P.V. Sharma⁷⁶¹ add to this list: *Haremekhalā*, Kāśirāja, Svāmīdāsa, and *Yogarātnasamuccaya*.

Śivadāsa's commentary on the *Dravyaguṇa* is quoted in Priyavrat Śarmā's auto-commentary on his *Dravyaguṇasūtra*.

Śivadāśasena's contributions to the theory of dravyaguṇa, as contained in this commentary, have been studied by G.P. Sharma and P.V. Sharma.⁷⁶² Important is the view⁷⁶³ that vīrya predominates over rasa and vipāka over vīrya, in contrast to the opinion of Caraka, who arranges these concepts, in relation to their increasing strength, in the order rasa-vipāka-vīrya.⁷⁶⁴ In this respect Śivadāśasena follows an earlier authority, quoted anonymously. He also disagrees with the definition of rasa, as given by Cakra, and adheres to the way his father had characterized it.⁷⁶⁵ Suśruta's opinion that taste belongs to water as a mahābhūta and that the six tastes become manifest through mere contact (samsarga) with the other bhūtas,⁷⁶⁶ is rejected and replaced by the theory that the tastes are produced through a more specific process of changes (viśiṣṭā pariṇatīḥ) in mixtures of the bhūtas.⁷⁶⁷ An earlier authority is quoted again in support of this. Vīrya is considered to be connected with the essential part (sārabhāga) of the mahābhūtas.⁷⁶⁸ Śivadāsa holds that vipāka comes about by means of a renewed contact with the abdominal fire, after completion of the process of avasthāpāka or prapāka.⁷⁶⁹ He regards the amlavipāka as described by Caraka as included in Suśruta's concept of uṣṇavīrya.⁷⁷⁰

Śivadāśasena's descriptions of foodstuffs and drugs, as found in his commentaries on Cakrapāṇi's *Cikitsā* and *Dravyaguṇa*, are valuable in various respects. Sometimes he tries to harmonize apparently conflicting views found in earlier works,⁷⁷¹ sometimes he takes sides.⁷⁷²

Morphological characteristics of medicinal plants, their local names and their habitat are often recorded. In many instances Śivadāśasena seems to agree with interpretations offered by Cakrapāṇi or Ḍallaṇa while, on the other hand, he was not averse to consulting nighaṇṭus.⁷⁷³

Part 7

Authors and works from A.D. 600–1500

Chapter 1

Authors and works from the period A.D. 600–1000

The *Aṣṭāṅganighaṇṭu*

Contents

The *Aṣṭāṅganighaṇṭu*,¹ a treatise in 408 verses, is, as its name implies, related to Vāgbhaṭa's works. It belongs to Vāhaṭācārya's *Aṣṭāṅgaḥṛdayasaṃhitā* according to the colophon of one of its MSS,² though its introductory verse states that it is concerned with the drugs mentioned in the *Aṣṭāṅgasamgraha*. Actually, the first part of the work (verses 2–201) describes groups of drugs found in both treatises by Vāgbhaṭa, as is also indicated in one verse of the *Aṣṭāṅganighaṇṭu* itself,³ for it is based on the twenty-five groups of chapter fifteen of the *Sūtrasthāna* of the *Aṣṭāṅgaḥṛdaya* and chapter sixteen of the same section of the *Aṣṭāṅgasamgraha*,⁴ to which one group has been added, making a total of twenty-six. This extra group, the pippalyādigaṇa,⁵ inserted as number three of the series, is also found in the *Aṣṭāṅgasamgraha*, but at the end, in prose, and worded quite differently.⁶ The *viratarādigaṇa* (103–112), on the other hand, has been taken from the *Aṣṭāṅgaḥṛdaya*, not from the *Aṣṭāṅgasamgraha*, where the names of the drugs composing it are different.

The *Aṣṭāṅganighaṇṭu*, after quoting one of Vāgbhaṭa's gaṇas, proceeds with a string of synonyms of each of the drugs composing the group. A significant feature is that the author coined new synonyms for each of these drugs, in order to arrive at a clear characterization.⁷ In a few cases a member of a gaṇa has been suppressed.⁸

This first section of the work is followed by a second, heterogeneous one, called *viprakīrṇa*, about various medicinal plants, vegetables and fruits (203–286), inorganic substances (287–311ab), poisons (311cd–312), aquatic plants (313–317ab), flowers (317cd–322), liquids, dairy produce, products of the sugarcane, and oils (323–328ab), fermented drinks (328cd–332ab), cow's urine and cow dung (332cd), cereals, pulse and sesamum (333–340), technical terms denoting groups of drugs, such as *triphalā*, etc. (341–342), names for 'drug' (343ab), animals (343cd–372), the dhātus and doṣas (373–378ab), various terms (378cd–379), the earth, sun, planets and some related terms (380–391ab), deities (391cd–400), terms relating to plants (401–404), and terms relating to medicine in general (405–406). The treatise ends with two verses dedicated to *Dhanvantari* and the *Aśvins*.

The *Aṣṭāṅganighaṇṭu* is quoted in *Priyavrat Śarma's* auto-commentary on the *Dravyaguṇasūtra*.

The *Aṣṭāṅganighaṇṭu* may be compared for its structure and contents with the *A-bhidhānamajjarī* and *Paryāyaratnamālā*.

Special feature

The *Aṣṭāṅganighaṇṭu* is the first work to mention the medicinal plant called kumārī (278).⁹

The author

The *Aṣṭāṅganighaṇṭu* is an anonymous work.¹⁰

Date

As the *Aṣṭāṅganighaṇṭu* is based on Vāgbhaṭa's works, it cannot be earlier than the seventh century, which is corroborated by the presence of verses taken from the *Amarakoṣa*.¹¹ The earliest author to quote from the *Aṣṭāṅganighaṇṭu*, without naming his source, is, according to P.V. Sharma, Indu in his commentary on the *Aṣṭāṅgaḥṛdayasaṃhitā*,¹² which would, if correct, establish that the work was in existence in the latter half of the twelfth century.¹³ Aruṇadatta once quotes an ardhśloka from the *Aṣṭāṅganighaṇṭu*¹⁴ and often gives synonyms to be found in it,¹⁵ which indicates that it was composed before the middle or latter half of the twelfth century.¹⁶ In P.V. Sharma's opinion, Vopadeva (second half thirteenth century) was certainly acquainted with several quotations from it which were current in āyurvedic circles in his time, as appears from his *Hṛdayadīpakānighaṇṭu*, while it was also used by Madanapāla for the composition of his *nighaṇṭu*, completed in A.D. 1375, and by Hemacandra for his *Nighaṇṭuśeṣa* (twelfth century). Finally, P.V. Sharma brings forward that Jejjāṭa appears to have been acquainted with the *Aṣṭāṅganighaṇṭu*;¹⁷ the corroboration of this assertion would considerably push back the date of the work.

As the material adduced by P.V. Sharma in support of his assertions consists merely of series of synonyms which resemble those found in the *Aṣṭāṅganighaṇṭu* without being identical with them, it is impossible to regard his claims as proved.

Specific developments in the field of materia medica concerning the identity of medicinal plants and their synonyms were put to use by P.V. Sharma as a second type of evidence with a view to determine the date of the *Aṣṭāṅganighaṇṭu*. Though a fruitful approach in itself, the conclusions derived from it remain highly controversial.¹⁸

The third type of evidence adduced by P.V. Sharma consists of some words in the *Aṣṭāṅganighaṇṭu* which may be indicative of its date. These words are harayoni (290) as a synonym of rasendra, i.e., mercury, pārvaṭībīja (290) as a synonym of abhraka, i.e., mica, both pointing at a rather developed state of rasaśāstra, and pūti (299), i.e., civet, which is also found in the *Paryāyaratnamālā* (794) and the *Siddhayoga* (22.79). For the above reasons and in view of the fact that certain drugs introduced in the tenth century or later, such as akarakarā, ahiphena, mastagī and rūmī, as well as pārasiyayavānī, which occurs for the first time in the *Siddhayoga*, are absent from the *Aṣṭāṅganighaṇṭu*,¹⁹ P.V. Sharma concludes that the work was written before the ninth century.²⁰ In support of this date he finally tries to demonstrate that Mādhava's *Paryāyaratnamālā*, assigned by him to the ninth century, represents a more developed state of knowledge than the *Aṣṭāṅganighaṇṭu*.²¹ All this evidence, taken together, establishes, in P.V. Sharma's view, that the *Aṣṭāṅganighaṇṭu* was probably composed in the eighth century.²²

This conclusion is too specific to be endorsed. The facts are in favour of placing

the *Aṣṭāṅganighaṇṭu* in about the same period as Vṛnda's *Siddhayoga* and the *Paryāyaratnamālā* (about A.D. 800–1000).

The *Aśvinīkumārasaṃhitā*

The *Aśvinīkumārasaṃhitā* or *Aśvinīsaṃhitā*,²³ also called *Āśvineyasaṃhitā*,²⁴ has partly been preserved.²⁵

The *Aśvinīkumārasaṃhitā* is quoted in Candrāṭa's *Yogaratanasamuccaya*, Gopāladāsa's *Cikitsāmrta*, Trimalla's *Yogatarāṅgiṇī*,²⁶ and in the *Yogaratanākara*.²⁷ Cakrapāṇidatta borrowed from it according to Nīścala.²⁸ The *Aśvinīkumāramata* is referred to by Kāśīrāma in his commentary on the *Śāringadharasaṃhitā*;²⁹ the *Aśvinīmata* is one of the sources of Basava's *Śivatattvaratanākara* and the *Bheṣajakalpasaṅgraha*. The *Aśvinīsaṃhitā* is quoted in the *Bhesajamañjūsāsanaya*, by Nīścala³⁰ and by Bhāvamiśra.³¹ The *Āśvineya* is quoted in Anantakumāra's *Yogaratanasamuccaya*,³² Dataraṃa's *Bṛhadrasarājasundara*,³³ Trimalla's *Bṛhadyogatarāṅgiṇī*,³⁴ and the *Vaidyacināmaṇi*;³⁵ it is referred to in the *Ratnākaraśādhayogagrantha* and Revāṇasiddha's *Virabhaṭṭīya*. An *Āśvinasaṃhitā* is quoted in Anantakumāra's *Yogaratanasamuccaya*,³⁶ by Bhāvamiśra,³⁷ Candrāṭa,³⁸ Soḍhala, and Śrīdāśapaṇḍita.³⁹ Recipes from the *Āśvinasaṃhitā* occur in Gaṇeśaśarman's *Pākrapadīpa*,⁴⁰ Soḍhala's *Gadanigraha*,⁴¹ the *Vaidyacināmaṇi*,⁴² Vaṅgasena's *Cikitsāsārasaṅgraha*,⁴³ and the *Yogaratanākara*.⁴⁴ An *Āśvina* was one of the sources of the *Basavarājīya*, *Jvaracikitsita*,⁴⁵ and *Jvarasamuccaya*,⁴⁶ an *Aśvinīya* of the *Basavarājīya*, an *Āśvinīya* of Anantakumāra's *Yogaratanasamuccaya*,⁴⁷ an *Aśvina*- and *Aśvinīyasaṃhitā* of Candrāṭa's *Yogaratanasamuccaya*. Formulae from an *Aśvinīkalpa* occur in the *Basavarājīya* and Vallabheन्द्रa's *Vaidyacināmaṇi*. The *Kumārasaṃhitā*, quoted in Anantakumāra's *Yogaratanasamuccaya*, appears to be the same as the *Aśvinīkumārasaṃhitā*.⁴⁸ A *Kumārasaṃhitā*, probably also identical with the *Aśvinīkumārasaṃhitā*, is quoted in the *Bhesajamañjūsāsanaya*. A work by the *Aśvins* is mentioned as a source by Harṣakīrti.

A *Samnipātakalikā*,⁴⁹ *Samnipātalaṅkāṇa*,⁵⁰ *Samnipātaprakaraṇa*,⁵¹ or *Samnipātārṇava*,⁵² a *Trayodaśasaṃnipātānidānacikitsā*,⁵³ and a *Dhāturatnamālā*,⁵⁴ as well as a *Haritakīkalpa*,⁵⁵ are said to form part of the *Aśvinīkumārasaṃhitā*.

The *Samnipātakalikā* was one of the sources of Kalyāṇa's *Bālatantra*⁵⁶ and is quoted by Meghamuni in his *Meghavinoda*.⁵⁷ An unspecified *Samnipātakalikā* is quoted in Karandīkar's *Nidānadīpikā*.⁵⁸ The *Haritakīkalpa* from the *Āśvinasaṃhitā* is quoted in Anantakumāra's *Yogaratanasamuccaya*.⁵⁹

A commentary on the *Samnipātārṇava*, entitled *Samnipātapaḍaṇḍikā*, may have been written by Māṇikya, son of Padmanābha.⁶⁰ Hemanidhana or Hemanidhāna,⁶¹ a Jain monk of the Kharataragaccha, who probably lived in Bikaner, wrote a commentary on the *Samnipātakalikā* in A.D. 1676/77.⁶² A Hindi commentary (stābaka) by Rāmavijaya Upādhyāya, also a Jain monk of the Kharataragaccha, dates from 1774/75.⁶³

An *Aśvinīnighaṇṭu* is quoted in the *Basavarājīya*.⁶⁴ A *Nāḍīnidāna*, *nirṇaya* or *-parīkṣā*,⁶⁵ as well as a *Yogasāra*,⁶⁶ are ascribed to the *Aśvins*. Several formulae are attributed to them.⁶⁷

The *Brahmavaivartapurāṇa* credits the *Aśvins* with a *Cikitsāsāraṇtra*.⁶⁸ The Ti-

betan tradition credits them with two treatises, called *Gces-bsdus*⁶⁹ and *Byañ-khog khrims-kyi lun-hod hphro-ba*.⁷⁰

Candranandana

Candranandana was the author of (1) the *Madanādinighaṇṭu*, (2) a commentary, called *Padārthacandrikā*, on the *Aṣṭāṅgaḥṛdayasaṃhitā*,⁷¹ and (3) a collection of glosses (*vr̥tti*) on the latter work.⁷²

The *Madanādinighaṇṭu*

The *Madanādinighaṇṭu*,⁷³ also called *Gaṇanighaṇṭu*,⁷⁴ and sometimes *Oṣadhinighaṇṭu*,⁷⁵ enumerates both names and properties of medicinal substances.⁷⁶ The treatise can be divided into two main parts. The first one, consisting of 592 verses, is arranged in thirty-two sections (*gaṇa*), in agreement with the number of groups of drugs (*gaṇa*) in Vāgbhaṭa's *Aṣṭāṅgaḥṛdayasaṃhitā* (Sū.15).⁷⁷ The second part (*viprakīrṇadravyaprakaraṇa*; about 440 verses) deals with miscellaneous drugs, not mentioned in the preceding sections, and some other subjects.⁷⁸ It is mainly devoted to medicinal plants, but also deals with inorganic substances, fermented fluids, grain and pulse, prepared dishes, animals, terms designating parts of plants, groups of drugs, and anatomical terms. The plan of the work therefore resembles that of other *nighaṇṭus*, also based on the *Aṣṭāṅgaḥṛdayasaṃhitā*, such as the *Aṣṭāṅganighaṇṭu* and the *Abhidhānamāñjarī*. Candranandana follows Vāgbhaṭa in his order of the drugs, but adds strings of synonyms, properties, and actions.⁷⁹

The *Madanādinighaṇṭu* was translated into Tibetan under the title *Sman-dpyad yan-lag brgyad-paḥi sñin-poḥi hḡrel-pa-las sman-gyi miñ-gi rnam-graṇis*, i.e., *Vaidyakāṣṭhāṅgaḥṛdayavṛtter bheṣajanaṃasūcī*,⁸⁰ and forms part of the Tanjur.

The *Madanādinighaṇṭu* is quoted by Bhānuji Dīkṣita⁸¹ and Kṣīrasvāmin⁸² in their commentaries on the *Amarakoṣa*, Śivadatta in his auto-commentary on the *Śivakoṣa*,⁸³ and Śrīvallabhagaṇi in his commentary on the *Nighaṇṭuśeṣa*.⁸⁴ Some quotations from a *nighaṇṭu* in Indu's *Śaṣītekhā* agree with verses from the *Madanādinighaṇṭu*.⁸⁵

A *Gaṇanighaṇṭu* is quoted in the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Bṛhannighaṇṭuratnākara*.⁸⁶

Special features

Candranandana distinguishes rather frequently more than one type of a drug mentioned as a single entity by Vāgbhaṭa; sometimes he adds items to a group. Examples are: the *sthalaja* and *jalaja* varieties of *madhuka* (1.3); *nimba* and *mahānimba* (1.7–8); a second type of *viśālā* (1.12–13); two varieties of *vidula* (1.26–27);⁸⁷ *danṭī* is added to *dahana* (1.31); two types of *elā* (1.63–64); *hareṇu* is added to *elā* (1.66–67); *saṛṣapa* and *raktasaṛṣapā* (1.68–69); two types of *kumbha* (= *trivṛt*; 2.1–2); two types of *lodhra* (2.19–20); three types of *śigru* (4.19–21); *madhūla* is added to *madhūka* (4.23–24); three types of *dūrvā* (6.1–3); *dhanvayāsa* is added to *anantā* (6.5–6); *śvetakāmbhojī*⁸⁸ is added to *śvetapākī* (6.16–17); two types of *vidārī* (8.1–2), of *pañcāṅgula* (8.4–5), of *vṛścīva* = *varṣābhū* (8.11–12), and of *gopasutā* (= *śārīvā*; 8.18–19); *lāmajjaka* is added to *uśīra*

(9.1–4); three types of *śīśīra* (= *candana*; 9.5–7); two types of *bāṇa* (15.14), *darbha* (17.7), and *tuttha* (18.3); *kuṭheraka* is added to *kālamāla* (22.7–8).⁸⁹ A few items, added by Candranandana, are absent from the *Aṣṭāṅgaḥṛdayasaṃhitā*, for example *lāmajjaka* (9.3). Some names differ slightly from those employed by Vāgbhaṭa.⁹⁰

The section on miscellaneous drugs contains some items which are not found in the *Aṣṭāṅgaḥṛdayasaṃhitā*, such as *ādārikā* (p.22), *damanaka* (p.26),⁹¹ *dadhīpuṣpī* (p.23),⁹² *graiṣmī* (p.28), *kaṇṭakarañja* (p.22), *śīrīṣikā* (p.21), *vanakārpāsī* (p.21), *vārṣikī* (p.28), and *vāsantī* (p.27).

The author

One of the problems connected with Candranandana is whether one or two authors of this name should be distinguished, one who wrote the *Padārthacandrikā*, and another one who composed the *Madanādinighaṇṭu*.⁹³

P.V. Sharma adduced two arguments in favour of this distinction.⁹⁴ First, the *maṅgala* of the *Padārthacandrikā* is addressed to Viṣṇu, that of the *Madanādinighaṇṭu* to Sarvajña, who is probably the Buddha. This may indeed point to two different authors, but can also be explained by assuming a syncretistic attitude to religion on the part of Candranandana. The second argument is based on a discrepancy in Candranandana's genealogy. The edited Sanskrit text of the *Padārthacandrikā* mentions Kalyāṇa and Vidyā as his parents, whereas Ravinandana or Ratinandana is the name of Candranandana's father in the Tibetan version of this commentary. This argument does not carry conviction, since it appears improbable that Kalyāṇa and Vidyā are the actual names of Candranandana's parents.

The issue whether one or two Candranandanas contributed to the medical literature can be elucidated by comparing the synonyms of medicinal plants, found in the *Madanādinighaṇṭu*, with those mentioned in the *Padārthacandrikā*. It so happens that the synonyms occurring in the latter work are for the greater part one of the first of the strings of names of the former, which suggests that both works are by one and the same author. The Tibetan tradition also regards the commentator and the author of the *nighaṇṭu* as identical.⁹⁵

Candranandana mentions his name at the beginning of the *Padārthacandrikā* and *Madanādinighaṇṭu*.⁹⁶ His father was Ravinandana, as indicated at the beginning of the *Madanādinighaṇṭu* and in the Tibetan version of the *Padārthacandrikā*.⁹⁷ His grandfather was called Mahānandana.⁹⁸ The *Padārthacandrikā* was written at the instance of Śakunadeva.⁹⁹ Candranandana was, according to the Tibetan tradition, a native of Kāśmīr.¹⁰⁰

Date

An important clue to Candranandana's chronological position is the Tibetan translation of the *Padārthacandrikā*, made by Rin-chen bzai-po between A.D. 1013 and 1055.¹⁰¹ A more precise dating would be reached if Candranandana were identical with Candradeva, mentioned in the biography of the Elder G-yu thog-pa,¹⁰² the chief physician of the Tibetan king Khri-sron lde-bcan, who lived in the eighth century. This G-yu thog-pa visited Candradeva on his way to India and received instruction from him. The same

biography relates that G-yu thog-pa met Vairocana, who claimed to have received the *Rgyud-bzhi* from Candradeva.¹⁰³ The identity of this Candradeva with Candranandana, considered as not impossible by R.E. Emmerick,¹⁰⁴ would place our author in the middle of the eighth century. The same date was suggested by G. Huth.¹⁰⁵ The quotations from Candranandana's works are not helpful in establishing his date, since they are found in authors who are later than Rin-chen bzah-po.

Candraṭa

Candraṭa,¹⁰⁶ the son of Tisāṭa, who wrote the *Cikitsākalikā*, composed the following works: (1) a commentary on the *Cikitsākalikā*, (2) *Suśrutapāṭhaśuddhi*, (3) *Yogarātnasamuccaya*, (4) *Yogamuṣṭi*, (5) *Dravyāvalī*, and (6) *Vaidyatīrīmśattīkā*.

(1) Candraṭa's authorship of the commentary on the *Cikitsākalikā*¹⁰⁷ is evident from the opening sentences of the work. It is written in a lucid style and is important for the constitution of the text of the *Cikitsākalikā* and its interpretation. At some places Candraṭa informs us of sources not referred to by Tisāṭa himself.¹⁰⁸

Many basic āyurvedic concepts are discussed at length in the comments on verse sixteen of the *Cikitsākalikā*.¹⁰⁹ Some new ideas are put forward in this part of the commentary. Candraṭa distinguishes three types of bala (strength): bala (in its restricted sense as physical strength), ojas, and tejas. Sattva is said to be of two types: bhūrutva and sahiṣṇutva. The concept of sātmya is elaborately dealt with according to the views of various authorities. Candraṭa himself is of the opinion that sātmya is of eight types. Regarding the concept of vipāka, he agrees with Suśruta in distinguishing two types. Drugs (auśadha) are classified according to the predominance of one or more of the mahābhūtas in them.

The concept of diseases caused by one's karman is elucidated by a long quotation from a work not mentioned by name.¹¹⁰ Differences of opinion between the followers of Caraka (kāyacikitsakāḥ) and Suśruta (śalyatantrakartārāḥ) are noticed.¹¹¹ Details on the preparation of various medicines are frequently given,¹¹² as well as the names of compound formulae.¹¹³ The interpretations of the names of drugs are mostly correct,¹¹⁴ but sometimes doubtful or wrong,¹¹⁵ probably because the identity of a number of medicinal substances had become controversial, or because of insufficient knowledge. Occasionally, a medicinal plant is described and its vernacular name mentioned.¹¹⁶ The term piccaṭa (roga) is employed as a synonym for the eye disease or group of eye diseases usually called pilla.¹¹⁷ Añjanas, to be employed in eye diseases, are divided into three types: guṭikā, rasa and cūrṇa; guṭikā is subdivided into pīṇḍa, varti and guṭikā in a restricted sense.¹¹⁸

Authorities quoted or referred to by Candraṭa are: Agniveśa (1; 2), Āstūka (mentioned by Tisāṭa; 387), the Aśvins (1, 227, 306: mentioned by Tisāṭa), Ātreya (1; 5), Aupadhenava (1; 145), Aurabhra (1; 2; 145), Bhaṭṭa¹¹⁹ (introductory part of the commentary), Bhela (2: mentioned by Tisāṭa; 20; 80; 82; 248: mentioned by Tisāṭa), Bhoja (2: mentioned by Tisāṭa; 85; 115), Bhṛgu (2: mentioned by Tisāṭa), Bhṛguja¹²⁰ (375: mentioned by Tisāṭa), Cakṣuṣyeṇa (2; 16; 80; 81; 85; 283; 303–304;

354–355), Caraka (passim), Dhanvantari (1: mentioned by Tisāṭa), dhānvantariyāḥ (2), Haricandra¹²¹ (maṅgala), Hārīta (2: mentioned by Tisāṭa; 82; 115; 116; 140–142; 173–174; 212–215), Janakātmaja¹²² (347: mentioned by Tisāṭa), Jatūkarṇa (2), Jejjāta (maṅgala; 161–162; 191–192; 221–222), Kāṅkāyana (147 and 151: mentioned by Tisāṭa), Kapilabala (283), Kharanāda (16; 82; 283), Kṛṣṇātreya (85), Kṣārāpāni (2; 16; 190; 208–211; 270), Nimi (2), nyāyavidāḥ (16), Parāśara (2: mentioned by Tisāṭa; 82; 298–302: mentioned by Tisāṭa), Pauṣkalāvata (1), Puṣkalāvata (2; 145), *Rasavaiśeṣika* (16),¹²³ *Siddhasāra* (81),¹²⁴ Sudhīra (maṅgala), Śukra¹²⁵ (383), Suśruta (passim), vaiśeṣikāḥ (16), Tisāṭa (19; 82; 83–84; 110; 111; 193; 208–211; 212–215; 354–355), Vaitaraṇa (2), vaiyākaraṇāḥ (16), Varuṇa (383),¹²⁶ Videha¹²⁷ (2; 102; 104; 229–231: mentioned by Tisāṭa; 304: mentioned by Tisāṭa; 327; 328; 343; 346–347: Janakātmaja in Tisāṭa's text), Viśvāmītra (361–364), *Vṛddhabhoja* (325), and *Vṛddhavidēha* (85).

Noteworthy is the absence of Vāgbhaṭa,¹²⁸ although he is quoted in Candraṭa's *Yogarātnasamuccaya*.

Candraṭa's commentary on the *Cikitsākalikā* is quoted in Priyavrat Śarmā's auto-commentary on the *Āyurvedadarśana* and Ṭoḍara's *Āyurvedasaukhya*.

(2) The *Suśrutapāṭhaśuddhi*,¹²⁹ a MS of which was described by J. Taylor,¹³⁰ consists of a revision of the *Suśrutasaṃhitā*, made by Candraṭa after the commentary of Jejjāta, as he indicates himself.¹³¹ The text frequently differs from the printed edition of the *Suśrutasaṃhitā* according to Taylor, whereas A.F.R. Hoernle¹³² notes that it does occasionally, though not very materially, differ from its traditional recension; elsewhere,¹³³ however, the latter remarks that Candraṭa's revised text deserves a searching examination because it contains additional and spurious verses recorded as such by Ḍalhaṇa. Hoernle's suggestion¹³⁴ of a connection between Candraṭa and Kārttikakuṇḍa rests on very slender evidence and needs corroboration. P.V. Sharma, being of the opinion that the text of the *Suśrutasaṃhitā* as we have it contains changes and additions by the hand of Candraṭa,¹³⁵ tried to identify some of the alterations.¹³⁶ However, the description of the India Office MS of the *Suśrutapāṭhaśuddhi* is in contradiction with such a view.

Candraṭa refers to his *Suśrutapāṭhaśuddhi* and *Yogarātnasamuccaya* at the end of his commentary on the *Cikitsākalikā*, which proves that the commentary is the latest of the three.

A *Pāṭhaśuddhi* and *Mahāpāṭhaśuddhi*, quoted extensively by Anantakumāra,¹³⁷ cannot but designate Candraṭa's work. A *Pāṭhaśuddhi* is cited in the *Bhesajjamañjū-sāsannaya*.

The quotations from the *Pāṭhaśuddhi* in Anantakumāra's *Yogarātnasamuccaya* sometimes agree, sometimes disagree with the current text of the *Suśrutasaṃhitā*.¹³⁸

Candraṭa is referred to and extolled in Bālācārya's *Suśrutasaṃhitā*, which may mean that the author of this work was acquainted with the *Pāṭhaśuddhi*.

(3) The *Yogarātnasamuccaya*,¹³⁹ written by Candraṭa, son of Tisāṭa, according to its first two verses,¹⁴⁰ is a collection of prescriptions,¹⁴¹ arranged in eight sections (adhikāra):¹⁴² ghrṭa,¹⁴³ taila, cūrṇa, guṭikā, avaleha, gadaśānti,¹⁴⁴ (pañca)karman, and kalpa.¹⁴⁵

The kalpa section describes nineteen kalpas: amlavetasa-, suvarṇa-, citraka-, kākamācī-, śatāvarī-, bhallātaka-, haritakī-, triphalā-, laṣuna-, guḍūcī-, śilājatu-, guggulu-, vārāhī-, kukkuṭī-, eraṇḍataila-, kuṅkuma-, gokṣura-, and alambuśākālpa.¹⁴⁶

The work is of great value because it gives the source of its recipes. These sources are, according to P.K. Gode,¹⁴⁷ who first listed them: Agastya, Agniveśa, Amitaprabha,¹⁴⁸ Amṛtamālā, Āryasamuccaya, Aśvinasamhitā,¹⁴⁹ Aśvinikumārasamhitā, Aśvinīyasaṃhitā, Bhadrāsena,¹⁵⁰ Bhadravartman,¹⁵¹ Bhāradvāja, Bheda,¹⁵² Bhiṣanmuṣṭi, Bindusāra, Cakṣuṣyeṇa,¹⁵³ Caraka, Cikitsākalikā, Dravyāvalī, Hārīta,¹⁵⁴ Jatukarṇa, Kāṅkāyana, Kharanāda, Kṛṣṇātreyā, Kṣārapāṇi, Nāvanītaka,¹⁵⁵ Parāśara,¹⁵⁶ Śaivasiddhānta, Śaunaka, Siddhasāra,¹⁵⁷ Śivasiddhānta, Suśruta, Tīsaṭa, Vāgbhaṭa, Vāhaḍa, Vaitaraṇa, Videha,¹⁵⁸ Vṛddhavāhaḍa, Vṛddhadeha, Yogaratnasamuccaya, and Yogayukti.

D.Ch. Bhattacharyya¹⁵⁹ added the following names: Ātreya, Carakottaratana, Cikitsāsamuccaya,¹⁶⁰ Gopura, Ravigupta, and Vṛddhasuśruta;¹⁶¹ absent from his list are: Agastya, Bhāradvāja, Bhadrāsena, Kāṅkāyana, Śaivasiddhānta, Vāhaḍa, Vaitaraṇa, and Yogaratnasamuccaya.

R.P. Bhatnagar and P.V. Sharma¹⁶² added some more names: Acyuta,¹⁶³ Amṛtakumbha,¹⁶⁴ Amṛtaprabha or -prabhā,¹⁶⁵ Aupadhenava, Bhāluki, Cikitsāsāra, Cikitsā-tīśaya,¹⁶⁶ Dhānvantara, Dhānvantari, Kālapāda,¹⁶⁷ Mahendrakalpa, Nāgārjuna,¹⁶⁸ Rudrasena,¹⁶⁹ Śālihotra, and Vaṅgadatta; absent from this list are:¹⁷⁰ Agastya, Bhadrāsena, Śaivasiddhānta, Śivasiddhānta, Tīsaṭa, Vaitaraṇa, and Yogaratnasamuccaya.

Nīścala mentions the Svalpavāgbhaṭa as one of Candrāṭa's sources;¹⁷¹ he also reproduces recipes which Candrāṭa took from some unspecified treatise (tantrāntara).¹⁷² Anantakumāra's quotations show that Candrāṭa borrowed from the Īśānayoga,¹⁷³ Mahodadhī,¹⁷⁴ and Śacīmata.¹⁷⁵ Anantakumāra also quotes a recipe derived from Candrāṭa that was written on a stone pillar (śilāstambha) by the Yavanas.¹⁷⁶

The Yogaratnasamuccaya is the same as the Candrāṭasamgraha, quoted by Nīścala; it may also be identical with the Candrāṭasāroddhāra,¹⁷⁷ usually separately listed.¹⁷⁸

Candrāṭa's collection of formulae was well known in former ages, for it is repeatedly quoted by Nīścala.¹⁷⁹ Soḍhala was inspired by it when he composed his Gadaniḡraha.¹⁸⁰ The work was one of the sources of Cakrapāṇidatta's Cikitsāsamgraha.¹⁸¹ It is also one of the sources of Dattarāma's Bṛhadrasarājasundara,¹⁸² the Bhāratabhaiṣajyaratnākara, and the Rasayogasāgara.¹⁸³

The work is probably quoted as Yogaratnasamuccaya¹⁸⁴ in the Bhesajjamañjūsānnaya (which refers to Candrāṭa too) and the Yogaratnākara. Hemādri's citations from a Yogaratna are in all probability from Candrāṭa's work.¹⁸⁵

Anantakumāra's quotations from Candrāṭa¹⁸⁶ are undoubtedly from the Yogaratnasamuccaya. Nīścalakara, Śivadāsasena,¹⁸⁷ Śrīdāsaṇḍita and Śrīkaṇṭhadatta refer to Candrāṭa or quote from him as the author of a therapeutic work which contains a large number of formulae, i.e., the Yogaratnasamuccaya. Ṭodara quotes a verse on the proper doses of various type of kaṣāya, which may be from the Yogaratnasamuccaya.¹⁸⁸

Candrāṭa did not recognize samgrahagrahaṇī as a distinct type of grahaṇī.¹⁸⁹ His readings of Caraka and Suśruta differed occasionally from those accepted by other authors.¹⁹⁰

The works by Candrāṭa called (4) *Yogamuṣṭi*¹⁹¹ and (5) *Dravyāvalī*¹⁹² are recorded by P.V. Sharma;¹⁹³ the (6) *Vaidyatṛiṣaṭṭikā* is only mentioned by Th. Aufrecht¹⁹⁴ and in the NCC.¹⁹⁵

Śivadāsasena quotes from a *Vṛndaṭīkā* by Candrāṭa,¹⁹⁶ which probably means that Candrāṭa wrote a commentary on Vṛnda's *Siddhayoga*.

The author

The only fact known is that Candrāṭa was the son of Tīsaṭa. The first verse of the *Yogaratnasamuccaya* shows that he followed his father's footsteps in being a sun-worshipper.¹⁹⁷

Date

As discussed in the section on the date of Tīsaṭa, the terminus ad quem for the composition of the *Cikitsākalikā* is provided by Nīścalakara's statement that Cakrapāṇidatta (about A.D. 1050) utilized Tīsaṭa's work in writing his own therapeutic compendium.¹⁹⁸ The earliest author after Cakrapāṇidatta to quote from Candrāṭa is Śrīkaṇṭhadatta in his *Vyākhyākusumāvalī*.¹⁹⁹ The terminus post quem of Tīsaṭa and Candrāṭa has been deduced from a remark at the beginning of the latter's commentary on the *Cikitsākalikā*, proving that he was acquainted with Haricandra's and Jejjāṭa's commentaries.²⁰⁰ As Jejjāṭa's date is disputed,²⁰¹ it is preferable to depart from another fact in establishing the upper chronological limit. This fact consists of Candrāṭa's quoting the *Siddhasāra*²⁰² and its author, Ravigupta,²⁰³ who lived about A.D. 650. This fixes the period of Tīsaṭa and Candrāṭa between 650 and 1050. If Candrāṭa wrote a commentary on Vṛnda's *Siddhayoga*, as seems to follow from a remark of Śivadāsasena,²⁰⁴ the dates of Tīsaṭa and Candrāṭa fall within the period 900–1050.²⁰⁵

Govardhana

Govardhana²⁰⁶ was the author of several medical works: (1) a commentary (ṭīkā) on the *Bṛhattantrapradīpa*;²⁰⁷ (2) *Karmamālā*, a commentary on the *Yogaśataka*;²⁰⁸ (3) *Kaumudī*;²⁰⁹ (4) *Nyāyasārāvalī*;²¹⁰ (5) *Paribhāṣāvalī*.²¹¹ All these works are quoted in Nīścalakara's *Ratnaprabhā*.²¹²

The *Ratnamālā*, quoted by Nīścala,²¹³ is also a work of Govardhana according to D.Ch. Bhattacharyya²¹⁴ and P.V. Sharma.²¹⁵

Some add to Govardhana's works the *Cikitsāleśa* and *Rogapradīpa*.²¹⁶

An unspecified work of a Govardhana is quoted in Gopāladāsa's *Cikitsāmṛta*.

Govardhana is later than Amitaprabha²¹⁷ and the Mādhava who wrote the *Yogavyākhyā*.²¹⁸ D.Ch. Bhattacharyya²¹⁹ supposed Govardhana to be later than Vṛnda and to be a contemporary of Cakrapāṇidatta.²²⁰ Some clues in Nīścala's *Ratnaprabhā* may point to Govardhana as an author who is later than Ravigupta, Jejjāṭa, Śīvarasena, Īśāna, and Gadādhara, but earlier than Mādhava, Cakrapāṇidatta and Bakula.²²¹

Govardhana is reported to be a son of Cakrapāṇi.²²²

The *Jivakapustaka*

The *Jivakapustaka* is a collection of prescriptions, preserved in Sanskrit and in a Khotanese version.

The manuscript of the *Jivakapustaka*²²³ contains three separate tracts,²²⁴ which means that it is a typical 'Sammelhandschrift'. Each tract begins with the word *siddham* (success). As neither a title nor a colophon are extant, and as the text has not been traced elsewhere, the convenient label *Jivakapustaka* has been assigned to it.²²⁵

Contents

The treatise²²⁶ contains a series of prescriptions, many of which have separate names, together with indications on their use. It begins as an exposition of the Bhagavant to Jivaka, who is called 'the king of physicians' in the Khotanese version. The Sanskrit text is mainly in ślokas and so corrupt that it can hardly be read. The Khotanese translation, based on this corrupt Sanskrit text that was hardly intelligible to the one who rendered it into Khotanese,²²⁷ is also metrical and is enlarged with regard to the Sanskrit original; it enumerates all the items of comprehensive Sanskrit terms like *daśamūla*, etc., and gives detailed instructions on the way the medicines should be prepared. Its most striking feature is the insistence on specifying in each instance the appropriate quantity of each drug and the amount of milk, water or oil required, also when those items are not found in the original Sanskrit. For this purpose a great variety of terms of measure is used.²²⁸

The prescriptions are divided into four sections, containing prescriptions for an agada, ghees (*ghṛta*),²²⁹ oils (*taila*) and powders (*cūrṇa*). J. Filliozat identified some of the formulae;²³⁰ later, many more could be traced by R.E. Emmerick.²³¹

Date

One of the clues to the chronological position of the *Jivakapustaka* consists of the fact that several formulae were borrowed from the *Siddhasāra*,²³² which makes it clear that it is later in date, probably considerably later, than the latter.²³³

The MS of the *Jivakapustaka* cannot be dated precisely. No detailed palaeographical study of the cursive Brāhmī script as used in Central Asia has yet been made. The language of the Khotanese version is 'late Khotanese'. All that can be said from the point of view of the language is that the text must have been written before the year A.D. 1000, after which no Khotanese was written.²³⁴

The *Jvarasamuccaya*

The *Jvarasamuccaya*²³⁵ is an anonymous monograph on fevers, dating from the tenth century.²³⁶

Authorities and works quoted are *Āśvina*, *Bhāradvāja*, *Bheḍa*, *Bhoja*, *Caraka*, *Hārīta*, *Jatīkarna*, *Kapilabala*, *Kaśyapa*, and *Suśruta*.²³⁷ The quotations from *Kaśyapa* often agree with the text of the *Kāśyapasaṃhitā*.²³⁸ Parts of the long citation from the *Bhālukitantra*, occurring in the *Madhukośa* on the *Mādhavanidāna*,²³⁹ recur, with variants,

in the *Jvarasamuccaya*, where they are attributed to *Kaśyapa*.²⁴⁰

The *Kriyākālaguṇottaratantra*

The *Kriyākālaguṇottaratantra*²⁴¹ is a Tantric text bearing upon medicine. It is in the form of a dialogue between Śiva and Kārtikeya. The latter puts questions to his father Śiva, wanting instruction about *gāruḍamantras* against poison, the characteristics of serpents and of demons, especially those who attack children, about embryology, and other subjects. The work is divided into three kalpas, named after the deities *Krodheśvara*, *Aghora*, and *Jvareśvara*.²⁴²

This Tantra dates from before the eleventh century, because Kṣemarāja, the pupil of Abhinavagupta, quotes it several times in his commentary, called *Netroddyota*, on the *Netratantra*.²⁴³ One of its MSS dates from 1184.²⁴⁴

The *Kriyākālaguṇottara* is quoted in the *Paraśurāmapratāpa*²⁴⁵ and the *Śiśurakṣāratna*. It was one of the sources of Nāgārjuna's *Kakṣapuṭa* and is mentioned in the *Mantrakhaṇḍa* of Nityanātha's *Rasaratnākara*.

The *Laṅkāvatāra*

A treatise called *Laṅkāvatāra* is said to be a Tantric work on medicine. One of the MSS dates from A.D. 908.²⁴⁶

The *Paryāyaratnamālā* by Mādhava Bhiṣaj or Mādhavakāra

The *Paryāyaratnamālā*²⁴⁷ or *Ratnamālā*²⁴⁸ is a lexicon, written by Mādhava Bhiṣaj²⁴⁹ or Mādhavakāra.²⁵⁰

Contents

The text of the *Ratnamālā* consists of about 1,300 ardhāślokas, but the edition numbers them from one to 1758 in the following way: ardhāślokas 1–578, pādas 579–1424, ardhapādas 1425–1472, ardhāślokas 1473–1758.

The treatise is primarily a *nighaṇṭu*, and, though it goes beyond the limits of medical terminology, the author wrote it for the sake of physicians, as appears from one of his introductory verses: "What can a valiant man do in a battle if he has no weapons? With regard to therapy the same holds true for a physician who has no (knowledge of) synonyms".

The *Ratnamālā* consists, apart from six introductory (1–12) and two concluding verses (1755–1758), of a synonymous (13–1472) and a homonymous section²⁵¹ (1474–1640), followed by a section containing definitions (1642–1754). The contents are summarily listed in ardhāślokas 9–12. The synonyms are dealt with first in ślokas (13–216) and ardhāślokas (218–578), followed by pādas (580–1424) and ardhapādas (1425–1472). The synonyms are usually given separately, in the nominative, without making much use of dvandvas and ekaśeṣas. The names of plants, animals, inorganic substances, articles of food, etc. (13–854), are accompanied by

their vernacular counterparts. The homonyms are divided into apyarthas (words with a single additional meaning each, given in the locative and indicated by the particle api), dvyarthas (words with two meanings) and bahvarthas (words with more than two meanings), distributed as follows: apyarthas (one apyarthas in one pāda) (1474–1504), dvyarthas (one dvyarthas in one pāda) (1505–1554), dyvarthas (one dvyarthas in one ardhaśloka) (1555–1586), and bahvarthas (1587–1640). The bahvarthas have from three to eight meanings and are arranged in such a way that the number of acceptations increases. The section dealing with definitions covers dietary articles (1642–1686), paribhāṣā (technical rules; 1687–1735), and māna (weights and measures; 1737–1754). The junctions between the various parts are indicated in the text itself (217; 579; 1473; 1641).

The synonymous section is concerned with medicinal plants (13–188), followed by a heterogeneous series of terms (189–217) and medicinal plants again (218–421). The work proceeds with minerals and metals (422–445), salts and caustic substances (446–451), sugar and related articles (452–455), medicinal substances (456–480), dairy produce (481–486), cow dung (487), names of animals (488–508), human beings and related terms (509–539), various terms (540–561), deities and other non-human beings (562–574), religious terms (575–578), medicinal substances and some medical terms (580–734), animals (739–822), various terms (823–828), cows and products of the cow (839–848), cereal products (849–862), medical terms (863–876), anatomical terms (877–944), parts of plants (945–954), various terms (955–1296), the seasons (1297–1302), the lunar mansions (1303–1314), colour adjectives (1315–1330), various terms (1331–1388), names of diseases (1389–1424), and various terms (1425–1472).

Special features

Many rare words are found in Mādhava's *Ratnamālā*. The group of medicinal plants called aṣṭavarga is mentioned (3.43–44).²⁵² Unusual names of plants are: āśita(ka) (651);²⁵³ aśokarohipi (352);²⁵⁴ aṣṭapādikā (311);²⁵⁵ asthisamhāra (389);²⁵⁶ cela (712);²⁵⁷ coraśuṇṭhi (295);²⁵⁸ dhustūraka (405);²⁵⁹ hastikarṇadala (= hastikarṇapālāśa; 100);²⁶⁰ hīlamocikā (374);²⁶¹ jūṃṃ (697);²⁶² kapāṭacakra (416);²⁶³ kāśmīraja as a synonym of kuṅkuma (264);²⁶⁴ kulatthikā (= vanakulattha; 420);²⁶⁵ kumbhāta (654);²⁶⁶ madhukukkuṭi (152);²⁶⁷ pītamudga (694);²⁶⁸ potaḡala (463);²⁶⁹ ṛkṣagandhā (= sarpagandhā; 470);²⁷⁰ sarpākṣi (386);²⁷¹ sudarśanā (363);²⁷² timiraka (= nakharāñjaka; 308);²⁷³ uccaṭā (395).²⁷⁴

Remarkable words are moreover: antragranthi as a synonym of atisāra (1401);²⁷⁵ bhiṣajita as a synonym of cikitsā (528), though it usually means auśadha;²⁷⁶ kothaka as a synonym of kukūṇaka (1390); nirvāhin and suvāhikā as names of a disease (1400);²⁷⁷ tarṣabhū as a synonym of kloman (909); vātāṇḍa and vradhna as synonyms of the disease called vṛddhi (1415); yonyarśas as denoting (yoni)kanda (1392).

Mādhava and his *Ratnamālā* are quoted or referred to by Bhānuji Dīkṣita in his *Rāmāśramī* or *Vyākhyāśudhā* on the *Amarakoṣa*, written in the first half of the seventeenth century, probably between A.D. 1620 and 1640,²⁷⁸ Hārāṇacandra in his commentary on the *Suśrutasamhitā*,²⁷⁹ Haricaraṇasena in his *Paryāyamuktāvali*,²⁸⁰

Mallinātha in his *Amarapadapārijāta* on the *Amarakoṣa*, dating from the fourteenth century,²⁸¹ Medinikara in his *Nānārthaśabdakoṣa*, written in the thirteenth century, probably between 1200 and 1275,²⁸² Nārāyaṇa Vidyāvinoda in his commentary on the *Amarakoṣa*,²⁸³ Niścalakara,²⁸⁴ Rādhākāntadeva in his *Śabdakālpadruma*,²⁸⁵ Rāyamukutaṃaṇi in his *Padacandrikā* on the *Amarakoṣa*, composed in 1431/32,²⁸⁶ Śivadāśasena in his commentary on Cakrapāṇi's *Dravyagūṇa*,²⁸⁷ Śivadatta in the auto-commentary on his *Śivakoṣa*, dating from 1677/78,²⁸⁸ Umeśacandragupta in his *Vaidyakaśabdasindhu*, and Vandyaghaṭṭiya Sarvānanda in his *Ṭikāsarvasva* on the *Amarakoṣa*, written in 1159/60.²⁸⁹ Mādhava's lexicon is said to be quoted several times in Vidyāvinoda Nārāyaṇa's commentary on the *Amarakoṣa*.²⁹⁰

A work called *Ratnamālā* that may be Mādhava's lexicon is quoted by a Kaudikāra who was one of Rāyamukutaṃaṇi's sources.²⁹¹ The *Ratnamālā* may have been known to Vijayarakṣita who quotes from it without specifying the source,²⁹² Vācaspati's commentary on the *Mādhavanidāna* contains the same quotation, adding that it is taken from the *Abhidhāna*,²⁹³ which indicates that it may be different work, whether earlier or later than the *Ratnamālā*. According to T. Chowdhury's note to his edition of the text, the work is also quoted in Yādavaprakāśa's *Vaijayantī* (eleventh century), Kṣīrasvāmin's commentary on the *Amarakoṣa*, composed in the first half of the twelfth century,²⁹⁴ and the *Dhanvantarīyanighaṇṭu*. A *Nāmanighaṇṭu* by Mādhava, quoted by Devarāja Yajvan in his *Niruktabhāṣya*,²⁹⁵ may be the *Paryāyaratnamālā*.²⁹⁶

The author

Mādhava Bhiṣaj was a son of Indrakara and lived at Śilāhrada. D.Ch. Bhattacharyya has observed²⁹⁷ that Śilāhrada appears to have been a famous place, at a considerable distance from Pāṭaliputra, for it is mentioned in an illustration in Vācaspatimīśra's *Nyāyakaṇikā*:²⁹⁸ "Someone who has obtained a favour at Pāṭaliputra will certainly not remember it without confusion at Śilāhrada". The ancient Śilāhrada has been identified as the modern Pattharghattā near Bhāgalpur in Bihār, at a certain distance from Patnā, the ancient Pāṭaliputra.²⁹⁹ This Pattharghattā is the site of the Vikramaśīla university which flourished during the Pāla dynasty.³⁰⁰ The vernacular names of medicinal plants, added to the Sanskrit synonyms of the *Paryāyaratnamālā* in the margin of the text, are in favour of assigning a Bengal origin to the author,³⁰¹ if they indeed derive from him and have not been added later.

Date

Since it is an established fact that Vandyaghaṭṭiya Sarvānanda quotes from the work, the *Ratnamālā* was composed before A.D. 1159/60. If it could be proved that Yādavaprakāśa used it in composing his *Vaijayantī*, it would be earlier than the eleventh century. Internal evidence, consisting of the absence of ahiphena and bhaṅgā, together with their synonyms, points to a period preceding the eleventh century.

Indicative of a date later than about 800 are the following points. Firstly, the presence of gandhaka (435), pārada (719) and abhra (720), as well as pūti and its synonym khaṭṭāsikā (794). Secondly, the occurrence of vātingana (360), often supposed to be of Persian origin, as a synonym of vārtākī, the eggplant, *Solanum melongena* Linn.³⁰²

Thirdly, the presence of the disease called (yoni)kanda (1392), described for the first time in the *Mādhavanidāna*, though the term is used in a different sense in the *Ratnamālā*. The word *vradhna* as a synonym of *vrddhi* (1415) is adduced by P.V. Sharma as indicating that the *Ratnamālā* is posterior to *Vṛnda's Siddhayoga*,³⁰³ but that argument is not compelling because *Vṛnda* (40.20) describes *vradhna* (= *vradhna*) as separate from *vrddhi*, which would rather point to the posteriority of *Vṛnda*. Unconvincing too is P.V. Sharma's claim that the last verse of the *Ratnamālā* imitates a stanza from *Māgha's Śiśupālavadha* (2.112),³⁰⁴ dating from the seventh century. P.V. Sharma's arguments for regarding the *Ratnamālā* as posterior to the *Aṣṭāṅganighaṇṭu* should be regarded as tentative and doubtful.³⁰⁵

Summarizing, it can be said that *Mādhava's Ratnamālā* probably dates from the period 800–1000.³⁰⁶ The earlier view that it was written by the author of the *Mādhavanidāna* should completely be given up.³⁰⁷

Another work called *Paryāyaratnamālā* was written by Maheśvara Miśra.³⁰⁸

Māhuka or Mādhuka

Māhuka or *Mādhuka* was the author of the *Haremekhalā*,³⁰⁹ a treatise written in Prakrit verse.³¹⁰

Contents

The work, written in āryā metre, has a total of about 1,500 verses.³¹¹ It is arranged in seven chapters (*pariccheda*), in conformity with the seven hoods of the serpent *Vāsuki*, which form the girdle (*mekhalā*) of *Śiva* (*Hara*).³¹² The number of verses of some chapters differs in the editions: chapter one 191 (11+19+6+155 in ed. b); chapter two 103 (edition a) or 101 (edition b);³¹³ chapter three 71 (both editions); chapter four 389 (edition a) or 415 (edition b);³¹⁴ chapter five 281 (edition a).

The *Haremekhalā* deals with a diversity of subjects. The first chapter, called *koṭhālāhiāra* (*kautūhalādhikāra*),³¹⁵ opens with a maṅgala addressed to *Paśupati*, nine verses on the author, and a verse explaining the purpose of the book.³¹⁶ A series of nineteen verses follows, introducing the subject of chapter one by giving examples. This subject consists of unusual phenomena giving rise to curiosity and wonder (*kautūhala* or *āścarya*), which are brought about by the power of gems, drugs, and mantras. A series of six verses extols the adroit person who makes a living by producing these phenomena. The remainder of chapter one describes a long series³¹⁷ of methods (*prayoga*) of bringing about these exciting events, which, amongst many other things, consist of recipes to make the mouth beautifully red when chewing betel (21–25), recipes for an ink by means of which one can write a book that may be read in utter darkness (34–35) or which makes letters written on the back of the hand visible on the palm (36), procedures to make *madirā* smell like water (45), to write letters which remain floating on water (47), to make fruits fall down from trees (58–59), and produce objects invisible to the eye (60), procedures that enable a person to swim under water like a fish (100) or to walk on the surface of water (102), etc. The second chapter, called *riujanadamana* (*ripujanadamana*; 2.101), is, as its title

indicates, concerned with procedures to be used against enemies.³¹⁸ Chapter three is about subjugation (*vaśīkaraṇa*).³¹⁹

The fourth and longest (*vipula*; 4.1) chapter is the most interesting one with regard to medicine and deals with the treatment of diseases, or, to use the term employed by the author, *śarīrapariamma* (*śarīraparikarman*), i.e., body care. The order in which the diseases are mentioned is chiefly, though not consistently, based on the division of medicine into eight limbs: *śālākya* (2–87), *kāya* and *śālya* (88–259), *bhūtaavidyā* (260–265), *agada* (267–301), *kaumārābhṛtya* (309–380), *rasāyana* (385–392), and *vājīkaraṇa* (393–396). A second and most unusual ordering principle in the sections on *śālākya*, *kāya* and *śālya* is the arrangement of the diseases from top to bottom.

The section on *śālākya* begins with prescriptions which provide even a bald person with a beautifully curly crop of hair (2–10), and proceeds with formulae against diseases of the head (11–30), amongst which those turning grey hair black again have a prominent place (20–28). Thereafter the following subjects are covered: diseases of the ears (31–41), procedures which increase the size of the earlobes and also that of the penis (42–49), eye diseases (50–66), *kāmalā* (67–69), diseases of the nose (70–71), and diseases of the mouth (72–87). Then *vyaṅga* is dealt with (88–92), and prescriptions are given which make the face beautiful like the moon (93–105).

The section on *kāya* and *śālya* is concerned with a long series of subjects: *gaṇḍamālā* (105–109), *apabāhuka* and diseases of neck and shoulders (110–111), prescriptions which make the female breasts large and firm, increase the size of the earlobes and also that of the male member again (112–119), *plīhodara* and *udara* (120–123), abscesses (124), *udara* (125), *kṛmī* (126), *kuṣṭha* and related disorders (127–142), prescriptions which give beauty to the female and male body and remove a bad body odour (143–149), *raktapitta*, *kāmalā* and *pāṇḍuroga* (150–151), *pīnasa* (152–153), *svarabheda* (154), cough (155–156), hiccup, shortness of breath and some other disorders (157–159), *kṣaya* (160–165), *śūla* (166–168), *atisāra*, *grahaṇī* and *viṣūcikā* (169–174), *prameha* (175–176), *mūtrakṛcchra* (177), *aśmarī* and *śarkarā* (178–181), *gaṇḍamālā* and *kuraṇḍa* (182), diseases of the male organ (183–185), recipes which activate the digestive fire (199–200), vomiting (201), morbid thirst (202–203), fever (204–220), recipes which cause insomnia or cure it (221–225), *ūrustambha* (226–229), fractures (230), diseases of the feet (231–234), *maṣa* (235–237), burns (238–239), *śvayathu* (provoked by the fruits of *bhallātaka*, i.e., *Semecarpus anacardium* Linn.f.; 240), *vraṇa* (241–249), *naṣṭaśālya* (250–251), fistulas (252–254), *raktamaṇḍala* (255), *arbuda*, *granthī* and *gaṇḍamālā* (256–259).

The section on *bhūtaavidyā* is about *apasmāra* (269), *bhūtas* and *grahas* (261–265). A prescription against *cātūrthaka* (266) is loosely inserted. The section on *agada* is concerned with the poisons of many animals and some poisons of a different origin (e.g., *kodrava* and *dhattūraka*, 276; *pūgaphala*, 277–278). It is followed by prescriptions against *piṭākā* (302–303), *jvālāgardabha* (304) and *śītalikā* (305–308).

The section on *kaumārābhṛtya* deals with *pradara* (309–314), *raktagulma* and *amenorrhoea* (315–316), recipes which assure the birth of a son (317–318), promote pregnancy (319–321) or prevent it (322–324), prevent miscarriage (325–328) and bleeding during pregnancy (329); it contains a prescription against pain after an

abortion (330), prescriptions assuring an easy delivery and separation of the afterbirth (331–340); it deals with yoniśūla (341–344), the promotion of milk secretion (345–346), diseases of the breasts (346–347), kikkisika, i.e., striae (349), yonivibhramśa (350–351), prescriptions which make the female organs attractive (352–353, 355–358) and devoid of hair (359–361), and the restoration of virginity after intercourse (354). It ends with verses on the protection of children against grahas (362–367), with recipes against children's diseases (368–374), and recipes which assure that children grow up happily and in good shape (375–380).

The section on rasāyana and vājīkaraṇa covers the usual subjects. The chapter ends with the treatment of some disorders occurring in cows, buffaloes and mules (398–413), and, finally, a verse on a procedure which controls the colour of the feathers of newly hatched doves (414).

Verses 183–206 of this chapter are absent from edition a and replaced there by a text in verse and prose called *Puttalikāpañcaviṃśatikā*, concerned with harming enemies by means of magical procedures against their effigy (puttalikā).

Chapter five³²⁰ is concerned with the making of fragrant compounds and consists, according to the author himself (5.1), of an extract from various extensive works on the subject (gandhaśāstra).³²¹ It deals with³²² ambuvāsanavidhi (the preparation of perfumed water; 3–8), dantakāṣṭhavidhi (toothbrushes; 9–11), kavala (water for rinsing the mouth; 12), madhūcchiṣṭavidhi (beeswax applied to the lips; 13–14), netraparikarmāñjana (collyria; 15), mukhavāsa (perfumed water to scent the breath; 16–32), (sugandha)taila (fragrant oils; 33–58), udvartanasamvidhi (fragrant unguents used in rubbing the body; 59–61), snānakriyā (62–69) and snānopakarāṇa (70–85) (fragrant substances used during and after bathing), paṭavāsa (fragrant powders used for perfuming clothes, etc.; 86–87), dhūpa (88–109) and dīpavartī (110–120) (various forms of incense), sugandhasamvidhi (perfumes used as ointments; 121–158), various fragrant substances (159–192), substitutes (pratidinhi) for rare and expensive natural perfumes (kastūrikākṛti; 193–195), āsavavidhi (fragrant substances made by means of fermentation; 196–210), substitutes for rare and expensive natural perfumes: karpūrakṛti (211–213), kuṅkumakṛti (249–256), karpūratailakṛti (257–263), lavaṅgakṛti (264), elākṛti (265), and kuṣṭhakṛti (266), saḥakāra preparations (267–269), and, finally, puṣpadrāvaṇayukti (the extraction of essential oils from flowers, such as mallikā, campaka and ketakī; 270–272).³²³

Then follows, after an introductory verse (274), a nighaṇṭu, which gives, not in verse but in simple enumerations, synonyms of Prakrit terms, together with their Sanskrit counterparts.

Most of these words are names of plants which occur in the verses of the *Haramekhālā*, but they are preceded by names of gods, anatomical terms and names of animals, and followed by technical terms. The chapter ends with some verses on the utility of the *Haramekhālā* and its nighaṇṭu (275–277), its author (280), and the date of its composition (281). One of these concluding verses (278) indicates that the end of the treatise has been reached. Nevertheless a sixth and seventh chapter are known to exist. Chapter six is about arboriculture (pādapaparikarman) and food (āhāraavidhi).³²⁴ Chapter seven deals with inorganic substances (minerals, salts, gems,

and metals).³²⁵

The *Haramekhālā* is quoted by Basava in his *Śivatattvaratnākara*, by Kṣīrasva-min,³²⁶ Niścalakara,³²⁷ in the *Paraśurāmapratāpa*, by Nityanātha in the *Rasaratnākara*,³²⁸ Śivadāsasena,³²⁹ Śrīkaṇṭhadatta in the *Kusumāvalī*,³³⁰ Śrīvallabhagaṇi in his commentary on Hemacandra's *Nighaṇṭuseṣa*,³³¹ and Ṭoḍara. It is referred to by Kokkoka in his *Ratirahasya*,³³² by Nityanātha³³³ and Śrīdāsapaṇḍita. Cakrapāṇidatta may have derived some formulae from it.³³⁴ The *Kakṣapuṭa* mentions the *Haramekhālā* as one of its main sources.³³⁵ The *Kāmaratna* contains a recipe said to derive from the author of the *Haramekhālā*.

A *Śivamekhālā*,³³⁶ quoted by Ṭoḍara,³³⁷ is probably the same as the *Haramekhālā*.

Special features

Noteworthy terms and features of the *Haramekhālā* and its commentary in the field of nosology are: jhiṇijhiṇiā (jhiṇijhiṇikā; 12.15),³³⁸ a disorder explained as sūptapādātā (numb feet); the use of the term lūā (lūtā; 2.19–20), probably in the sense of inflamed sore; uppiāsa (4.11), explained as a synonym of the disease called dāruṇa, characterized by tvakcatāna, i.e., cracking of the skin; dāruṇa (dāruṇaka; 4.13) is said to be a disease of the skin of the head and to be the same as uppiāsa; arūsiā (arūṣṣikā; 4.16) is said to consist of small pustules; the description of head lice (4.18); pūiroa (pūitiroga; 4.35), the same as karnasrāva; añjanaguliā (añjanagulikā; 4.66) as a synonym of an eye disease called añjanapiṭakā; khunṁkhuṇāṣṇiā (4.70) as designating a nosebleed (nāsikāśirāśoṇita); avvaradigubbhavaghuṇadantaā (aparadigudbhavaghuṇadantaka; 4.86); gaṇḍāpacī as a synonym of gaṇḍamālā (4.105); carāṇadaddu (carāṇadadru; 4.129), a disease of the skin of the feet; khasarāi (khasarāṇi; 4.130) as a skin disease; dubbhita (durbhita; 4.140) as a synonym of sidhma; rāāmānda (rājamānda; 4.161) as a synonym of rājayakṣman, also called nṛpavyādhi; the presence of parīṇāmasūla (4.166); a variety of śarkarā, called atāṇḍasakkara (atāṇḍasarkarā; 4.180–181); galagaṇḍa as a synonym of gaṇḍamālāpacī (4.182); the term kuraṇḍa (4.186–188), used to designate a swelling of one or both testicles (aṇḍa- or vṛṣṇavṛddhi); raṇḥaṇiā (raṇḥaṇiā; 4.228–229) as a synonym of ūrustambha;³³⁹ a disease of the skin of the legs called rattamaṇḍala (raktamaṇḍala; 4.255); the description of keloid, vaṇakīṇagaṇṭhi (vaṇakīṇagaṇṭhi; 4.259); a disease of the skin called kīḍapiḍā (kīḍapiḍakā; 4.302); the mention of jvālā-gardabha and jālagardabha as synonyms (4.304); the presence of śīlīkā (śīlīkā; 4.305–306), put on a par with visphoṭa; the mention of an epidemic form (upasargaja) of this disease (4.306); mahāruhira (mahārūdhira; 4.310–311) and atirajas (4.310 and 312) as synonyms of pradara; a disease of the female breasts called ṭhaṇakīkaḍa (stanakīkaḍa; 4.346); the description of varaṅgavibbhaṃsa (varaṅgavibhramśa; 4.350), probably to be equated with prolapsus uteri; a children's disease called vacchārūka (vatsārūṣi; 4.373), characterized by the presence of parasites in the lesions on the head; khunṁkhuṇiā (khunṁkhuṇikā; 4.374) as a synonym of kukkūṇaka; a children's disease called mutthai (mustakī; 4.374), in which small pustules arise on the interior of the eyelids; a disease of horses and mules called variphōḍa (vārisphoṭa; 4.411), characterized by blisters.

These peculiarities show that Māhuka has not been influenced by the *Mādhavani-*

dāna; the order of the diseases of that work has not been adopted, and the new disorders, described for the first time by Mādhava, are absent, with the exception of *pariṇāmasūla* (4.166).

Māhuka's therapeutical prescriptions are partly of a magical nature. Enlargement of the spleen, for example, is treated by throwing away, as far as possible, the root of *indravāruṇī*, divided into two halves, while pronouncing the name of the patient (4.121).³⁴⁰ Products of animal origin are repeatedly used,³⁴¹ as well as mercury.³⁴² Opium is absent.

Yavanas are referred to as experts in the art of perfumery (5.58).³⁴³ The Tantric Buddhist deity Kurukullā is mentioned in the introductory verses.³⁴⁴

The *Haramekhalā* contains many interesting or rare names of plants and animals, both in its prayogas and its nighaṇṭu. Some noteworthy names of plants are: *āpallī* (4.252);³⁴⁵ *cakrāṅkā* (= *sudarśanā*; 1.69; 4.124);³⁴⁶ *caṇḍālikā* (= *raktakañcukā*; 3.39);³⁴⁷ *gomaya* (5.234);³⁴⁸ *gorambhā* (3.9; 4.400);³⁴⁹ *grhakumārī* (4.233);³⁵⁰ *jhiṇṭuka* (= *gopālaka*; 1.105);³⁵¹ *jhiṇṭuka* (= *gopālapīṭhaka*; 1.65 and 68);³⁵² *kacchodbhava* (= *guggulu*; 4.189); *kanakatvac* (4.96);³⁵³ *kandalī* (3.27);³⁵⁴ *kañṭhakakarañja* (5.159);³⁵⁵ *karabhavāruṇī* (3.63);³⁵⁶ *kāravallī* (4.54);³⁵⁷ *kirimāla* (= *āragvadha*; 4.148);³⁵⁸ *kuḍuhuñcī* (4.71);³⁵⁹ *kukkuramardaka* (= *rāmaśīṭalika*; 4.346);³⁶⁰ *kuliśataru* (= *sudhāvrkṣa*; 2.68);³⁶¹ *mayālī* (= *potikā*; 1.99);³⁶² *māyāphala* (4.352);³⁶³ *mohanī* (3.9);³⁶⁴ *niḥduṅgī* (= *sudhāvrkṣa*, 2.64);³⁶⁵ *paraśucchinna(ka)* (1.5; 5.271);³⁶⁶ *suvarṇatvac* (4.93);³⁶⁷ *tāmraśīṭhikā* (= *rāṅgiṭṭikā*; 1.23);³⁶⁸ *uṣṭravāruṇī* (3.53);³⁶⁹ *uttaṇṭakī* (4.257);³⁷⁰ *uttaraṇī* (= *uṣṭravāruṇī*; 4.338); *valla* (= *niśpāva*; 4.109);³⁷¹ *vāluṅka* (1.26 and 33);³⁷² *vanadrākṣā* (= *goṣṭhāmlikā*; 4.234);³⁷³ *vanakumārī* (4.248);³⁷⁴ *varāhakaraṇī* (4.84);³⁷⁵ *vatsakarkaṭikā* (= *gopālakarkaṭikā*; 4.179).³⁷⁶

The author

Māhuka, who mentions his name at the beginning³⁷⁷ of his treatise and again at the end of chapter five,³⁷⁸ states that he is a descendent of the great poet Māgha,³⁷⁹ a grandson of Kavimaṇḍana,³⁸⁰ a son of Mādhava,³⁸¹ and a pupil of Durjayabhaṭṭa³⁸² of the lineage of Śrīmūladeva.³⁸³ The latter performed miracles at Virajānagara³⁸⁴ during the reign of Unmattekeśarin,³⁸⁵ during the reign of Vallabhanarendra,³⁸⁶ and at Citrakūṭa during the reign of Jayavarāha.³⁸⁷ Māhuka himself was a resident of Bhīllamālapura³⁸⁸ and wrote his *Haramekhalā* at Citrakūṭa³⁸⁹ during the reign of Dharaṇivarāha.³⁹⁰

The author was a Śaiva, as appears from the maṅgalācarana, dedicated to Paśupati, and other references.³⁹¹

Date

The *Haramekhalā* was completed on the seventh day of Māgha of the year 887 of an unspecified era,³⁹² said to be the Vikrama era by the commentator, i.e., A.D. 829/830. This date was accepted by the editors of the two editions of the text, but rejected by D.Ch. Bhattacharyya.³⁹³ According to the latter, no king, called Dharaṇivarāha, reigned in the region of Citrakūṭa (i.e., Chitor) about 830. Two kings of this name are known; one of these, a Dharaṇivarāha of the Cāpa family, ruled in Vardhamāna (modern Wadhwan in Kāthiāwār), and the other, a Paramāra prince, in Candrāvati and

Arbuda (near Chitor) in 1002. Since Wadhan is a long distance from Chitor, D.Ch. Bhattacharyya assumes that the Paramāra king was Māhuka's patron and that the *Haramekhalā* was composed in 887 of the Śaka era, i.e., 965/966. In his view, this date is corroborated by Māhuka's reference to Māgha as a distant forefather. A.N. Upadhye³⁹⁴ also argued that the Śaka era may be preferable, but he prefers to identify the patron as Dharaṇivarāha, the Cāpamahāsantādhipati, who was a feudatory of Rājādhirāja Mahīpāla I of the Gurjara-Pratihāra dynasty of Kanauj.³⁹⁵ It is not yet possible to decide which view should be preferred.

The terminus ad quem of the *Haramekhalā* can be established as the eleventh century, because the work was put to use by Cakrapāṇidatta in the eleventh century and was quoted by Kṣīrasvāmin in the first half of the twelfth century.

Another medical treatise by an unknown author and of unknown date, called *Haramekhalātāntra*, has summarily been described by P.V. Sharma.³⁹⁶ It is completely different from Māhuka's work and referred to by the author as ■ mahauśadhisamuccaya.

The commentary on the *Haramekhalā*, written by an anonymous author, gives a Sanskrit chāyā of the Prakrit verses and explanations in Sanskrit. It is not only valuable with regard to information on plants, animals,³⁹⁷ etc., but also in providing detailed instructions on the preparation of medicines and perfumes, and in specifying the diseases mentioned in the text. Quotations are rare; the definitions of *pāmā* (4.136),³⁹⁸ *jvālāgardabha* (4.304)³⁹⁹ and *kukkūṇaka* (4.374)⁴⁰⁰ are quoted from an unnamed source, as well as the definition of the maximum length of life (*paramāyus*) in man and various animals (4.389),⁴⁰¹ the rules for cleansing the teeth (*dantadhāvanavidhi*; 5.11), and the definition of a *gaṇḍūṣa* and a *kavala* (5.12). In one case only the author names his source, namely Vāgbhaṭa (4.204).⁴⁰² He also summarizes in some verses at the end the topics dealt with in chapter four,⁴⁰³ and gives, in a series of about thirty verses at the end of chapter five, technical rules (*paribhāṣā*) for preparing the substances prescribed by Māhuka.

The maṅgala of the commentary indicates that its author was a Śaiva. That he was not the first commentator on the *Haramekhalā* is evident from a remark referring to predecessors.⁴⁰⁴ The date of the commentary cannot be established.

The *Jīvasūtra* attributed to Nāgārjuna

The *Jīvasūtra* is attributed to Nāgārjuna.⁴⁰⁵ This work, consisting of 205 verses, deals with the following subjects: the objective of the treatise (6–8); the three doṣas (*fiś-pa*): *vāyu* (*rīuṇ*), *pitta* (*mkhris*) and *kapha* (*bad-kan*), which arise from *kāma* (*ḥdod*), *krodha* (*khro*) and *moha* (*gti-mug*) respectively (9); the importance of the body (*lus*), place of residence (*yul*) and time (*dus*), i.e., the seasons, etc., for leading a happy life (10–12); the bodily constitutions (*lus*; 13–16); the predominance of the doṣas in the three stages of life (17); the predominance of the doṣas in various types of country (*yul*; 18–19); the relationships between the doṣas and the parts of day and night (20–21); their relationships with the seasons (22–24); the six tastes (*ro*) and their connections with the

doṣas (25–41); the relationships of the tastes with the guṇas (yon-tan; 42–45); sātmya and asātmya (hphrod and mi hphrod); 46–53); the regimen during the seasons (54–101); rules for the promotion of longevity (102–133); the non-suppression of natural urges (134–135); rules for the preservation of health (136–168); mutually disagreeing foods and drinks (169–194); rules to be applied in the various stages of life (195–205).

The text is ascribed to a Nāgārjuna of unknown date, but may well have been composed before A.D. 1000. The Sanskrit original, which must have existed, for the Sanskrit title, *Jīvasūtra*, is mentioned in the Tibetan text, has not been preserved.

The *Rasavaiśeṣikasūtra* ascribed to Bhadanta Nāgārjuna

The *Rasavaiśeṣikasūtra*, ascribed to Bhadanta Nāgārjuna,⁴⁰⁶ is one of the very few āyurvedic texts in pure sūtra style.

Contents

The basic concepts of āyurvedic pharmacology are the main concern of this treatise, which contains 486 sūtras, arranged in four chapters.⁴⁰⁷

After some introductory sūtras, in which it is stated that dravya, rasa, guṇa, vīrya, vipāka and karman are the roots of health and disease, chapter one deals with prakṛti (the natural state), vikāra (a morbidly altered state), and the distinctions between the two (8–31); the relationships among the doṣas (32–48); the seats (sthāna) of the doṣas and the digestive fire (agni) (49–76); the nature of the doṣas (77–92); the concepts of agni, bala, sātmya, and their interrelations (93–94); the span of life (āyus) and signs foreboding death (arīṣṭa) (95–98); the concepts of dravya, rasa, etc., and their interrelations (99–171).

Chapter two discusses dravya and the differences between dravya and guṇa (1–22); rasa and the way it is distinguished from guṇa (23–29); vīrya (30–36); vipāka (37); karman (38); the five mahābhūtas (39–75); the classification of substances (76–77); the parts of trees and plants in general (78–98);⁴⁰⁸ the pāñcabhautika character of the body (99–110) and of the senses (111–122); the varieties of medicinal substances of vegetable, mineral and animal origin (123).⁴⁰⁹

Chapter three is concerned with the six tastes (rasa) (2); conflicting views about the number of rasas (3–5);⁴¹⁰ the many varieties of each rasa (6–10);⁴¹¹ proofs for the existence of six rasas (11–37);⁴¹² the connections between the tastes and the mahābhūtas (38–43), and between rasa and dravya (47–60); the relationships between the tastes and the doṣas (61–72); the combinations of rasas and their connections with the doṣas (72–110); the guṇas and their relationships with the mahābhūtas (112–117).

Chapter four begins with an enumeration of the eleven types of vīrya and discusses their relationships with the bhūtas (1–26); more types of vīrya (27–30); vipāka (31–55); karman (56); viruddhāśana (57–61); anupāna (62–63); substitutes for drugs (64–66);⁴¹³ svasthavṛtta (the regimen in health) and āturavṛtta (the regimen in ill-health, aiming at recovery) (67–69); the pramāṇas (70); the catuṣpāda (71–72), and, finally, the success in treatment (73).

The *Rasavaiśeṣika(sūtra)* is quoted by Candrāṭa,⁴¹⁴ Ḍaḷhaṇa,⁴¹⁵ Priyavrat Śarmā,⁴¹⁶ and Satyadeva Vāsiṣṭha.⁴¹⁷

Special features⁴¹⁸

The author does not blindly follow established traditions, but works out his own position with regard to basic āyurvedic concepts. Rather often he quotes a series of conflicting views on a particular subject, which are repudiated before he begins bringing forward his own opinion.⁴¹⁹ A noteworthy trend is the repeatedly expressed rejection of a hierarchical ordering of concepts like agni, bala, and sātmya (1.94), dravya, rasa, guṇa, vīrya and vipāka (1.164), though this type of order is a characteristic of the early saṃhitās. This trend is coupled to an insistence on medical experience as the decisive factor on which to base an appraisal of the relative importance of all these concepts.⁴²⁰

Interesting features are also the mention of two series of seven prakṛtis (1.31),⁴²¹ the enumeration of only ten guṇas (3.111),⁴²² and the recognition of a large number of vīryas (4.1 and 27).⁴²³ Remarkable is the absence of a discussion on prabhāva, which is an important notion in the *Carakasamhitā* and other texts. Anupānas are of six types, dependent on their action: āhārasātmya, āhāravīryaghna, āhārānulomana, āhāraviparīta, āhārasodhana, and āhāraprajaraṇīya.⁴²⁴ The pramāṇas (means of acquiring valid knowledge) recognized are pratyakṣa, anumāna, upamāna, āgama, arthāpatti, and sambhava (4.70).⁴²⁵

The author

The name of the author is not mentioned in the text, but he is referred to as Bhadanta Nāgārjuna in the colophons of Narasiṃha's commentary on the work. His title Bhadanta,⁴²⁶ and also the addition of the term pravrajita to his name,⁴²⁷ may imply that he was regarded as a Buddhist, at least in later times.⁴²⁸ Ḍaḷhaṇa, who once quotes from the *Rasavaiśeṣikasūtra* without mention of its title, ascribes it to Nāgārjunācārya.⁴²⁹ J. Filliozat, one of the very few scholars to devote his thoughts to the work and its author, concludes that, as the views expounded in the work do not conflict with those of the *Mūlamadhyamakakārikā* of the Buddhist philosopher Nāgārjuna, both texts may have been composed by one and the same author.⁴³⁰ This identity cannot be established with any certainty; on the contrary, it seems much more likely that the two works were written by different persons, since no traces of Buddhism can be found in the *Rasavaiśeṣikasūtra*, which is mainly based on Sāṃkhya and Vaiśeṣika views.⁴³¹ Sankara Menon⁴³² considered Bhadanta Nāgārjuna to be the same as a certain Nāgavīrya, mentioned as his guru by Narasiṃha in his commentary (ad 1.2) on the work. This view cannot be substantiated and is completely arbitrary.⁴³³

Date

The period of composition is hard to determine, but a quotation from the *Rasavaiśeṣika* in Candrāṭa's commentary on Tisāṭa's *Cikitsākalikā* provides a terminus ante quem, namely the period A.D. 900–1050.⁴³⁴ Sankara Menon⁴³⁵ was of the opinion that, if Bhadanta Nāgārjuna was the preceptor of Narasiṃha, he may be considered to belong to the seventh century;⁴³⁶ in that case he lived, together with Narasiṃha, a life of seclu-

sion in a vihāra of the Taluk⁴³⁷ of Shertalla, most probably at Tiruvilāi. P.V. Sharma⁴³⁸ expressed as his view that the work may have been composed in the fifth century,⁴³⁹ by the Nāgārjuna who revised and completed the *Suśrutasaṃhitā*. J. Filliozat dates it in the age of the Buddhist philosopher Nāgārjuna, i.e., the first or second century.⁴⁴⁰ It is impossible to reach precision about the chronological position of the text, but more data may become available after it has been carefully studied.

Narasimha's commentary (bhāṣya) on the *Rasavaiśeṣikasūtra*

Narasimha's commentary (bhāṣya) on the *Rasavaiśeṣikasūtra*⁴⁴¹ is essential for understanding the often obscure and very concise sūtras. It presents a considerable number of quotations, usually without naming the source, with the exception of Bharadvāja (1.2), Caraka (1.6), Nimi (3.36 and 4.30), Suśruta (1.6), and Urabha (3.36). Important is the absence of quotations from Vāgbhaṭa's works, the more so when it is conceded that the *Rasavaiśeṣikasūtra* and its commentary were composed in Kerala,⁴⁴² where Vāgbhaṭa is the leading authority in āyurvedic theory and practice. Some scholars⁴⁴³ inferred from this that Narasimha must be earlier than Vāgbhaṭa. As it is improbable that the latter became the foremost authority for physicians in Kerala immediately after the composition of his works, it is also legitimate to suppose that, in Narasimha's times, Vāgbhaṭa had not yet the great prestige he acquired later.

An important element in the discussion of Narasimha's date is a reference to Subandhu's *Vāsavadattā* (ad 1.2), a work that became popular in Kerala,⁴⁴⁴ and that probably dates from the seventh century.⁴⁴⁵ This provides us with a terminus post quem of Narasimha and shows that he is contemporaneous with or posterior to Vāgbhaṭa.

Sankara Menon, who put forward that Nāgavīrya, mentioned by Narasimha (ad 1.2) as his guru and the author of some commentary, might be the same as Bhadanta Nāgārjuna, regarded Narasimha's commentary as being inspired by the oral explanations of the text by its author.⁴⁴⁶ This view need not be adopted, because Narasimha may have received the traditional interpretation of the sūtra after a lapse of time. Nāgavīrya may even have been one of his predecessors in writing a commentary on the *Rasavaiśeṣikasūtra*, the more so since Narasimha refers to divergent interpretations.⁴⁴⁷

Sankara Menon's conclusion that Narasimha, together with his teacher, led a secluded life in a vihāra in the Taluk of Shertalla, most probably at Tiruvilāi,⁴⁴⁸ cannot be proved. Narasimha's adherence to the Buddhist faith was inferred by him from the absence of a maṅgalācaraṇa at the beginning of his commentary and from a single reference to the word vihāra (ad 1.1), which are rather weak grounds. Sankara Menon assigns Narasimha to the period A.D. 630–730,⁴⁴⁹ when Buddhism was still flourishing in Kerala.⁴⁵⁰ Until Narasimha's commentary has been subjected to thorough study, it can, however, only be asserted safely that he lived after Subandhu.⁴⁵¹

Narasimha's commentary is quoted in Priyavrat Śarmā's auto-commentary on the *Dravyagunāsūtra*.

The *Yogaśataka*, attributed to Nāgārjuna or Vararuci

The *Yogaśataka*, attributed to Nāgārjuna or Vararuci,^{452,453} is an early example of a type of text to become current later, namely the type consisting of small collections of formulae of compound medicines (yoga), covering the eight divisions of āyurveda.

Contents

The *Yogaśataka* consists of a collection of verses in diverse metres,⁴⁵⁴ giving about one hundred recipes⁴⁵⁵ of compound medicines.⁴⁵⁶ The total number of stanzas varies in the MSS and editions.⁴⁵⁷

The body of the work has twelve sections, as indicated by the colophons: (1) jvaracikitsā (3–8); (2) kāyacikitsā (9–46); (3) netracikitsā (47–54); (4) śālākyaśataka (55–62); (5) śalyatantra (63–65); (6) viṣatantra (66–70); (7) bhūtavidyā (71–74); (8) bālātantra (75–77); (9) vājīkaraṇa and (10) rasāyana (78–83); (11) pañcakarman (84–88); (12) uttaratantra (89–92).

This list shows that jvaracikitsā has been detached from kāyacikitsā and netracikitsā from śālākyaśataka as separate items, making a total of ten divisions as against the traditional eight, and that a section on pañcakarman has been added, as well as one called uttaratantra. This last section specifies what is the best medicine in each group of diseases. The first two verses are of an introductory nature. Appended to the main body are lines of a more general purport, describing causes of excitation of the doṣas (103–105) and of āma (106), the relations between the seasons and the doṣas (107), and general measures of counteracting excitation of the doṣas (108–109). The treatise ends with two concluding verses.

Works referring to or quoting the *Yogaśataka* by name are: Anantakumāra's *Yogarātnasamuccaya*,⁴⁵⁸ the *Bhesajjamañjūsāsannaya*, Harṣakīrti's *Yogacintāmaṇi*, Kalyāṇa's *Bālātantra*,⁴⁵⁹ Karandikar's *Nidānadīpikā*,⁴⁶⁰ Mahimasamudra's *Vaidyakacintāmaṇi*, Mallinātha's commentary on the *Amarakoṣa*,⁴⁶¹ Meghamuni's *Meghavinoda*, Niścalakara's *Ratnaprabhā*,⁴⁶² Nidhi's *Yogasamuccaya*, Rāmacandra's *Rāma- vinoda*, the *Rasoddhāratāntra*, Trimalla's *Yogatarāṅgiṇī* and *Bṛhadyogatarāṅgiṇī*, and the *Yogarātnākara*.⁴⁶³

Vararuci is quoted in Anantakumāra's *Yogarātnasamuccaya*,⁴⁶⁴ the *Bhesajjamañjūsāsannaya*, and Niścalakara's *Ratnaprabhā*.⁴⁶⁵

Later treatises that have incorporated verses from the *Yogaśataka*⁴⁶⁶ are: *Bhaiṣajyaratnāvalī*, *Bhāvaprakāśa*, Cakrapāṇidatta's *Cikitsāsāṃgraha*,⁴⁶⁷ Soḍhala's *Gadani-graha*, Ṭoḍara's *Āyurvedasaukhya*,⁴⁶⁸ Vaṅgasena's *Cikitsāsārasāṃgraha*, Vṛnda's *Siddhayoga*, and the *Yogarātnākara*.

Translations

The *Yogaśataka*, once a popular work in India and popular in Sri Lanka until recent times, was also known in Tibet and Central Asia. Its popularity in Central Asia appears from the fragments of a bilingual MS from Kucā, containing the Sanskrit text of parts of the *Yogaśataka*⁴⁶⁹ and their translation into Tocharian B.⁴⁷⁰ The Tocharian version, which is not a literal one, has been expanded by adding explanations, though it follows

the Sanskrit text closely. The date of the MS cannot accurately be determined, but it may belong to the seventh century or a somewhat earlier period.⁴⁷¹

The Tibetan translation of the *Yogaśataka* (*Sbyor-ba brgya-pa*) forms part of the Tanjur⁴⁷² as the first of the series of medical works included in this vast collection.⁴⁷³ Its colophon states that the text and its commentary⁴⁷⁴ were explained first by the mahāpandita, the brāhmaṇa Jetakarna⁴⁷⁵ from Nepal, while the paṇḍita Buddhāśrījñāna⁴⁷⁶ from Eastern India later explained the first part; it was finally brought into agreement with three commentaries, translated and edited by Śākyabhikṣu Dpal Ni-ma rgyal-mchan bzañ-po⁴⁷⁷ (Śrī Sūryadhvajabhadra) at the request of the bhikṣu Amogha, who was well acquainted with the *Aṣṭāṅgahrdayasaṃhitā*, in the temple Dpal-śer (Śrī Prajñā), situated near the temple Hphags-pa hjig-rten dbaṅ-po (Ārya Lokeśa) in Skyi-roñ.⁴⁷⁸ This colophon enables us to conclude that the Tibetan translation of the *Yogaśataka* was produced later than the Tibetan version of the *Aṣṭāṅgahrdayasaṃhitā*, which dates from the period between A.D. 1013 and 1055,⁴⁷⁹ and that it came about with the collaboration of the Buddhāśrījñāna who lived about A.D. 1200.⁴⁸⁰ The Tibetan version of the *Yogaśataka* is not only found in the Tanjur, but also in the works of Bu-ston (A.D. 1299–1364),⁴⁸¹ accompanied by annotations (mchan).⁴⁸²

Author and date

It is clear from the above account that the Tibetan translation is not of much value in dating the *Yogaśataka*. Much more valuable is the bilingual from Kucā,⁴⁸³ placed by J. Filliozat in the seventh century or somewhat earlier, which shows that the *Yogaśataka* must have been composed before this period.⁴⁸⁴

Not much evidence is available on the sources of the *Yogaśataka*, except that it has verses in common with the *Carakasamhitā*.⁴⁸⁵ The name of its last section, uttaratantra, points to a period of composition later than that of the Uttaratantra of the *Suśrutasaṃhitā*.

An important topic discussed in relation to the *Yogaśataka* and its date is whether or not it can be identified as a medical compendium referred to by the Chinese Buddhist pilgrim I-ching⁴⁸⁶ at the end of the seventh century.⁴⁸⁷ J. Filliozat⁴⁸⁸ repeatedly expressed that this compendium cannot possibly be, as often claimed, the *Aṣṭāṅgasamgraha* or *Aṣṭāṅgahrdayasaṃhitā*. The *Yogaśataka* was a more suitable candidate in his eyes, which would establish the date of the work. Later,⁴⁸⁹ he expressed himself more cautiously in this matter. In this later period he was inclined to regard the Buddhist philosopher Nāgārjuna, who lived in the first or second century, as the author of medical treatises. He thought it to be not impossible to regard the *Yogaśataka* as a composition by this Nāgārjuna, though certainty could not be reached on this point.⁴⁹⁰ This early date of the *Yogaśataka* made him face two problems: firstly, that I-ching describes a recently composed treatise, and, secondly, that I-ching fails to mention the author by name, though Nāgārjuna was well known to him. This made Filliozat finally declare that no valid assertions can be made about the identity of the medical treatise mentioned by I-ching. I subscribe to the view that the issue cannot be settled. I-ching's observations are much too vague to be of any use in fixing the date of the *Yogaśataka* or any

other work regarded as representing the epitome referred to.⁴⁹¹

The attribution of the *Yogaśataka* to Nāgārjuna in Buddhist⁴⁹² and to Vararuci in Hindu tradition is not helpful for chronological purposes. The text involved is undoubtedly one and the same,⁴⁹³ but forms only one of the many works traditionally ascribed to these famous authors. These traditions are unreliable and it proves to be impossible to determine with any certainty who were the various authors of all these works ascribed to Nāgārjuna⁴⁹⁴ and Vararuci.⁴⁹⁵

Commentaries

Several commentaries are recorded on the *Yogaśataka* attributed to Nāgārjuna or Vararuci: (1) Amitaprabha's *Yogaśatabhāṣya*.⁴⁹⁶ (2) Bu-ston's annotations (mchan) on the Tibetan version; these annotations are based on (3) and (6).⁴⁹⁷ (3) Dhruvapāla's⁴⁹⁸ *Candrakalā*.⁴⁹⁹ (4) Govardhana's *Karmamālā*.⁵⁰⁰ (5) Hariharasarma's *Vaidyavallabhā*.⁵⁰¹ (6) A commentary by Khyab-hjug-lha (Viṣṇudeva).⁵⁰² (7) Mahīdhara's *Viśvavallabhā*.⁵⁰³ (8) A commentary by Mūlavara.⁵⁰⁴ (9) A commentary by Rūpanayana.⁵⁰⁵ (10) Samantabhadra's *Yogaśataṭikā*.⁵⁰⁶ (11) Sanātana's *Vallabhā*.⁵⁰⁷ (12) Somadāsa's *Karmamālā*.⁵⁰⁸ (13) Śrīpūrṇasena's *Yogacintāmaṇi*,⁵⁰⁹ also called *Abhidhānacintāmaṇi*.⁵¹⁰ Pūrṇasena commented on a longer version of the *Yogaśataka*.⁵¹¹ His rather concise *ṭikā* does not throw much light on the text of the *Yogaśataka*.⁵¹² Sources are not mentioned; he refers, in the introductory part of his commentary, to the *Kalyāṇakāraka*, Suśruta and Vāgbhaṭa. Pūrṇasena may have been a resident of Mahārāṣṭra.⁵¹³ (14) A commentary by Sūryadeva.⁵¹⁴ (15) A commentary called *Bālāvabodha*.⁵¹⁵ (16) A *vṛtti* by Vaiṣṇavavaidya.⁵¹⁶

The following is known on their chronology: Rūpanayana is posterior to Ravigupta and Jejjāta, who are quoted by him, and earlier than about 1500;⁵¹⁷ Dhruvapāla, Govardhana,⁵¹⁸ Mahīdhara and Sanātana lived before Niścalakara, who quotes from their commentaries on the *Yogaśataka*;⁵¹⁹ Dhruvapāla and Khyab-hjug-lha are earlier than Bu-ston, whose annotations are based on their works;⁵²⁰ Śrīpūrṇasena is said to belong to the sixteenth century.⁵²¹

A number of works with the title *Yogaśataka* are recorded, some of which may ultimately prove to be identical with the *Yogaśataka* ascribed to Nāgārjuna or Vararuci. Their authors are: (1) Akṣadeva.⁵²² (2) Amṛtaprabha⁵²³ or Amitaprabha; some verses of the *Cakradatta*, borrowed from Amitaprabha according to Niścalakara, form probably part of his *Yogaśataka*, which had verses in common with the *Yogaśataka* ascribed to Nāgārjuna or Vararuci.⁵²⁴ (3) Anantayogīśvara; Nandalāla, pupil of Kalyāṇa, wrote a commentary on this work, called *Anvayacandrikā*.⁵²⁵ (4) Deven-drakīrti Bhaṭṭāraka.⁵²⁶ (5) Haribhadraśūri.⁵²⁷ (6) Lakṣmīdāsa.⁵²⁸ (7) Madanasimha or Mathanasimha.⁵²⁹ (8) Samantabhadra.⁵³⁰ (9) Śrīkanthadāsa; Vararuci is said to have written a commentary, called *Abhidhānacintāmaṇi*, on this work.⁵³¹ (10) Vaidyanātha (putra).⁵³² (11) Vāmana.⁵³³ (12) Vidagdhaivaidya.⁵³⁴ A *Vṛddhayogaśata* by Gauḍavaṃśatilaka,⁵³⁵ Pūrṇasena,⁵³⁶ and Pūrṇasetūttamasūri⁵³⁷ are also known, as well as an anonymous *Yogaśatābhidhāna*.⁵³⁸

The *Tantrayuktivivāra* by Nīlamegha Bhiṣaj

The *Tantrayuktivivāra* by Nīlamegha Bhiṣaj⁵³⁹ is a short treatise,⁵⁴⁰ which consists of thirty-six śloka, accompanied by a rather extensive auto-commentary. It defines, in the same order, the thirty-six tantrayuktis which are found at the end of the *Carakasamhitā* (Si.12.41–45ab)⁵⁴¹ and the *Aṣṭāṅgasamgraha* (U.50.148–153). Only one item has been added to the series (aviparyaya, after viparyaya), without affecting the number of yuktis and verses as given in the text.

The tantrayuktis⁵⁴² are technical terms for the procedures which are necessary in order to arrive at a correct understanding and interpretation of scientific treatises. Vāgbhaṭa describes their function in the following way: “The tantrayuktis are like the rays of the sun on a pond with lotuses whose flowers are closed, and like the light of a lamp in a dark house. A person who studies the textbooks without being familiar with the tantrayuktis fails to grasp the meaning of what he reads, just as one fails to acquire wealth when one’s good fortune declines. By establishing the meaning of sentences, the tantrayuktis provide one with the desired success (in debates), enabling one to refute the propositions of those holding erroneous views. They reveal the meaning of utterances when these are hidden, interchanged, hinted at or indirectly expressed, and are said to be the essence of the ocean of the rules of speech” (A.s.U.50.154–157).

The tantrayuktis are only enumerated, not defined, in the *Carakasamhitā* and the *Aṣṭāṅgasamgraha*. Definitions and elucidations are supplied in the commentaries of Cakrapāṇidatta and Gaṅgādhara on the *Carakasamhitā*, Indu’s commentary on the *Aṣṭāṅgasamgraha*, and, above all, in Aruṇadatta’s commentary on the *Aṣṭāṅghṛdayasamhitā*.⁵⁴³ A list of thirty-two tantrayuktis, accompanied by explanations and illustrations, and commented on by Dālhaṇa, is found at the end of the *Suśrutasamhitā* (U.65). Another list, resembling that of the *Suśrutasamhitā*, and also consisting of thirty-two items, occurs at the end of the *Kauṭīliya Arthaśāstra* (adhikaraṇa 15).⁵⁴⁴ A list of thirty-two tantrayuktis, almost in the same order as in the *Suśrutasamhitā*, is found in the *Viṣṇudharmottarapurāṇa*.⁵⁴⁵

The definitions of the tantrayuktis in the work of Nīlamegha Bhiṣaj seem to be his own, or are those as expounded by his guru Sundara;⁵⁴⁶ in the latter case he only wrote the commentary.

The authoritative works quoted in his commentary are in the first place the *Aṣṭāṅgasamgraha* and *Aṣṭāṅghṛdayasamhitā*, while the *Caraka*- and *Suśrutasamhitā* rank second; Bhela, *Gopālikā*, *tāntrikāḥ*, and *Parāśara* are quoted once only.⁵⁴⁷

In the beginning and at the end the author mentions his name, Nīlamegha Bhiṣaj, and his second name, Vaidyanātha. The title of the work is given only at the end.

The treatise opens with salutations to Vāhaṭa: “May the physician Rāmagupta, who received his discernment from Avalokiteśvara,⁵⁴⁸ who is famous in this world under the name of Vāhaṭa, the moon of Sindhu from the lineage of Saṅghagupta,⁵⁴⁹ be present before our eyes”. The second verse refers to Indu and Jajjaṭa as pupils of Vāhaṭa. The third verse proclaims the author’s reverence for Ātreya and the other great sages, for the guru Āryāvalokita,⁵⁵⁰ Āryatārā,⁵⁵¹ Śrīsaṅghagupta, Vāhaṭarāmagupta, and the ācārya Sundara, while the fourth verse extols the excellence of the *Aṣṭāṅgasamgraha*. After

quoting the *Aṣṭāṅgasamgraha* (U.50.155, 150–153, 157), Nīlamegha makes it explicit that he composed his work according to the teaching of his guru Sundara.

The author

According to Kolatteri Śaṅkaramenon, this guru Sundara may be Sundarabhaṭṭācārya, the author of a work on toxicology, called *Lakṣaṇāmṛta*.⁵⁵² Kolatteri Śaṅkaramenon is of the opinion that both Sundara and Nīlamegha⁵⁵³ hail from Kerala,⁵⁵⁴ which is very probable indeed, because the only MS of Nīlamegha’s treatise belongs to a member of one of the aṣṭavaidyas families of Kerala, who adhere to Vāgbhaṭa’s teachings, as Nīlamegha did himself.

Date

Kolatteri Śaṅkaramenon places Nīlamegha in the first half of the ninth century,⁵⁵⁵ the period in which Śaṅkārācārya lived,⁵⁵⁶ because Buddhist influences are still traceable in Nīlamegha’s composition. He is convinced that Nīlamegha knew only the *Aṣṭāṅgasamgraha*, which he assigns to the first quarter of the eighth century, and not yet the *Aṣṭāṅghṛdayasamhitā*, which he regards as having been composed by a grandson or great-grandson of the author of the *Aṣṭāṅgasamgraha*.⁵⁵⁷ Kolatteri Śaṅkaramenon’s views on the dates of the *Aṣṭāṅgasamgraha* and *Aṣṭāṅghṛdayasamhitā* can be discarded. He is wrong in asserting that Nīlamegha did not yet know the *Aṣṭāṅghṛdayasamhitā* because the latter work is profusely quoted in his auto-commentary, also when not identical with the *Aṣṭāṅgasamgraha*.⁵⁵⁸ Nīlamegha’s references to Indu and Jejaṭa as pupils of Vāgbhaṭa imply that he lived later than these commentators and cannot be earlier than about A.D. 700. The Buddhist influences point to a date not much posterior to A.D. 800.

The *Kumāratantra* ascribed to Rāvaṇa

The *Kumāratantra*,⁵⁵⁹ ascribed to Rāvaṇa, is a work on a particular class of demons afflicting children, and their appeasement.⁵⁶⁰

Contents

This short treatise, written in a mixture of verse and prose, describes twelve demons, called mātṛkā, who attack children on the first day after birth and in the first month or year of their lives, on the second day and in the second month or year, etc., up to the twelfth day, month, or year.⁵⁶¹

Their names are Nandanā, Sunandā, Pūtanā, Mukhamuṇḍikā, Kaṭapūtanā, Śakunikā, Śuṣkarevatī, Aryakā, Bhūṣūṭikā, Nirṛtā, Pilipicchikā, and Kāmukā. The symptoms of children who are seized by these demons are enumerated, followed by magico-religious procedures destined to appease them and usually consisting of fumigations, bali offerings, the presentation of food to brāhmaṇas, etc. Each of the twelve sections of the text ends with a mantra in which Rāvaṇa is invoked.⁵⁶²

The complete text of Rāvaṇa’s *Kumāratantra* was, indicated as such, incorporated by Cakrapāṇidatta in his *Cikitsāsamgraha* (bālarogacikitsā 89–100)⁵⁶³ and commented

upon by Nīścalakara and Śivadāśasena; it also forms part of Gaṅgādhara's commentary on the *Carakasamhitā* (ad Ca.Sā.8.65), Govindadāsa's *Bhaiṣajyaratnāvalī* (bālaroga 181–193),⁵⁶⁴ Ṭoḍara's *Āyurvedasaukhya*,⁵⁶⁵ and Vaidyārāja's *Sukhabodha*.⁵⁶⁶ The *Amṛtasāgara*, attributed to Pratāpasiṃha, claims to reproduce the *Kumāratantra*, as found in the *Cakradatta*, but mentions a series of twelve mātṛkās with partly different names.⁵⁶⁷ A related text is found in Anantakumāra's *Yogaratanasamuccaya* (22.1–2),⁵⁶⁸ where Parāśara proclaims the *Kumāratantra* by Rāvaṇa, called Nārāyaṇīya *Bālatantra* in the colophon; the mantras, which are less in number, invoke Nārāyaṇa and Vāsudeva instead of Rāvaṇa. Trimalla's *Yogarataraṅgiṇī* contains an extract from Rāvaṇa's *Kumāratantra*.⁵⁶⁹ Trimalla's *Brhadyogatarāṅgiṇī* presents a related text, called the pūtanāvīdhāna from the *Kaumāratantra* by Rāvaṇa;⁵⁷⁰ the mantras of this work invoke Rāvaṇa and Nārāyaṇa for protection. The *Nighaṇṭuratnākara* and *Brhannighaṇṭuratnākara* mention, at the end of their sections on children's diseases, two series of grahīs, together with the symptoms they provoke and the treatment of these afflictions.⁵⁷¹ An unpublished Jain text, called *Vidyānuśāsana*,⁵⁷² contains a long section on bālagrahas that is said to derive from Rāvaṇa.⁵⁷³

The *Uḍḍiśatantra*, sometimes ascribed to Rāvaṇa, has a chapter (16), called *grastabālacikitsā*, which deals with the same subject as Rāvaṇa's *Kumāratantra*.⁵⁷⁴ The same applies to a chapter (pūrvārtha 41), entitled *Bālacikitsā*, of the *Īśāna(śiva)gurudevapaddhati*,⁵⁷⁵ and to a chapter (11) of Nārāyaṇa's *Tantrasārasaṅgraha*.⁵⁷⁶ The latter work describes three series of grahīs, who attack the child on the first to tenth day,⁵⁷⁷ in the first to twelfth month,⁵⁷⁸ and in the second to seventeenth year.⁵⁷⁹ Three related series of names occur in a chapter (299), entitled *bālagraharabālatantra*, of the *Agnipurāṇa*,⁵⁸⁰ and in Anantakumāra's *Yogaratanasamuccaya*.⁵⁸¹ Elaborate descriptions of many demons preying upon children are found in Kalyāṇa's *Bālatantra*. Śālinātha's *Rasamañjarī* contains a *Bālatantra* that is related to Rāvaṇa's *Kumāratantra*.

An illustrated, but fragmentary, Nepalese MS of a text that resembles the *Kumāratantra* of Rāvaṇa and was probably entitled *Dvādaśagrahasānti*,⁵⁸² was edited and translated by P.C. Bagchi.⁵⁸³ This work partially agrees with Rāvaṇa's *Kumāratantra*, but shows a closer affinity with a *Rāvaṇatantra* preserved in the Chinese Tripiṭaka.⁵⁸⁴ In the latter work the diseases caused by the grahamātṛkās are somewhat more distinctive and the mantras are different in each case. The Sanskrit names of the twelve mātṛkās of the Chinese text are Mātṛmandā, Sunandā, Revatī, Mukhamāṇḍikā, Biḍālī, Śakunī, Pūtanā, Śuṣkā, Āryakā, Jambhākā,⁵⁸⁵ Pilipicchikā, and Skandā.⁵⁸⁶

Demons called mātṛkā and similar beings who lurk upon children are mentioned in several more texts.⁵⁸⁷ A series of sixteen of these, threatening children from the first to the sixteenth day after birth and called Jātaḥāriṇī, is described in the *Kāśyapasaṃhitā*.⁵⁸⁸ Their names are Piśācī, Yakṣī, Āsurī, Kali, Vāruṇī, Śaṣṭhī, Bhīrukā, Yāmyā, Mātāṅgī, Bhadrakālī, Raudrī, Vardhikā, Caṇḍikā, Kapālamālīnī, Revatī, and Pilipicchikā. The *Hārītasamhitā*⁵⁸⁹ has recorded two series of these beings, called Pūtanā. The first consists of Lohitā, Revatī, Dhvāṅkṣī (or Vāyasī), Kumārī, Śakunī, Śivā, Ūrdhvaśeṣī, and Senā, who attack a child on the first to eighth day, while the names belonging to the second series are Rohiṇī, Vijayā, Kālī, Kṛtikā, Dākinī, Nisā, Bhūtakaṣṭī, and Kṛ-

śāṅgī.

A Tamil text that can be regarded as a parallel of the *Kumāratantra* was edited, translated and studied by J. Filliozat.⁵⁹⁰

Buddhist literature is acquainted with Hārītī as a deity devouring children.⁵⁹¹

Rāvaṇa's *Kumāratantra* is, apart from the texts already mentioned, quoted or referred to in Ambikādattaśāstrin's commentary on the *Rasendrasārasaṅgraha*, Cakrapāṇidatta's *Bhānumatī*,⁵⁹² Ḍaḥaṇa's *Nibandhasaṅgraha*,⁵⁹³ Gaṅgādhara's commentary on the *Carakasamhitā*,⁵⁹⁴ Gayadāsa's commentary on the *Suśrutasaṃhitā*,⁵⁹⁵ Jagannātha's *Yogasamgraha*,⁵⁹⁶ and Nīlakaṇṭha's *Sāntimayūkha*.⁵⁹⁷

An unknown work by Rāvaṇa is quoted by Kāśīrāma.⁵⁹⁸

Khare's commentary on the *Rasaratanasamuccaya* quotes Rāvaṇa on subjects belonging to alchemy.⁵⁹⁹ Laṅkeśa, i.e., Rāvaṇa, is mentioned as one of the Rasasiddhas in the *Pāradasaṃhitā* (1.96), *Rasajalanidhi* (III, 389–390), *Rasaratanasamuccaya* (1.2),⁶⁰⁰ *Rasatarāṅgiṇī* (1.29–32), and *Rasendrasambhava* (introductory verses).

The *Bhaiṣajyaratnāvalī* contains a recipe proclaimed to Rāvaṇa by Devadeva.⁶⁰¹ G. Hāldār mentions a formula (pūrṇacandrarasa) made by Śaṃkara for the benefit of Rāvaṇa.⁶⁰²

The Bombay edition of the *Kumāratantra* adds, after the twelve sections on the mātṛkās, 189 verses on children's diseases and their treatment.⁶⁰³

Other works going under the name of Rāvaṇa are:⁶⁰⁴

- 1 A *Rāvaṇakaumāratantra* in prose, of Buddhist inspiration, not identical with the published texts.⁶⁰⁵
- 2 A *Bālatantra* ascribed to Rāvaṇa.⁶⁰⁶
- 3 A *Bālatantra* ascribed to Daśagrīva.⁶⁰⁷ This work resembles the *Kumāratantra* in its general outline, but differs considerably in its details.⁶⁰⁸
- 4 A *Bālacikitsā* according to Rāvaṇa.⁶⁰⁹
- 5 A *Nāḍīparīkṣā* ascribed to Rāvaṇa.⁶¹⁰
- 6 An *Arkaprakāśa* attributed to Rāvaṇa.⁶¹¹
- 7 An *Arkaprakāśa* or *Arkacikitsā* by Laṅkānātha or Laṅkeśvara.⁶¹²
- 8 A *Nibandhasaṅgraha* ascribed to Laṅkānātha.⁶¹³
- 9 A *Prākṛtakāmadhenu* attributed to Laṅkeśvara.⁶¹⁴
- 10 A *Śivastuti* attributed to Laṅkeśvara.⁶¹⁵
- 11 A *Kālāgnirudropaniṣad* ascribed to Laṅkeśvara.⁶¹⁶
- 12 A *Rgvedabhāṣya*.⁶¹⁷
- 13 A *Śrīsūktabhāṣya*.⁶¹⁸
- 14 *Dīnākṛandana* by Rāvaṇa,⁶¹⁹ also called *Dīnākṛandanastotra* by Laṅkeśvara.⁶²⁰
- 15 The *Vaiśeṣikakāṇḍī*, an old bhāṣya on the *Vaiśeṣikasūtras*.⁶²¹
- 16 The *Uḍḍiśatantra*⁶²² and the *Indrajāla Uḍḍiśa*.⁶²³
- 17 The *Laṅkeśasiddhānta*.⁶²⁴

A *Bālagraharogyaśānti* according to Rāvaṇa's *Kumāratantra* is also recorded.⁶²⁵

A *Kaumāratantra* by Pārvaṭī is mentioned in some MSS of Vaṅgasena.⁶²⁶

The author

The attribution to Rāvaṇa⁶²⁷ of a treatise that deals with rituals aiming at the propitiation of demonic beings, whereas Rāvaṇa himself is a rākṣasa with demonic aspects, has been discussed by J. Filliozat, who traced his development into a benevolent being and the reputed author of medical treatises.⁶²⁸ A famous Buddhist text, the *Laṅkāvatārasūtra*, describes him as a pious king who gives a warm reception to the Buddha.⁶²⁹ The Uttarakāṇḍa of Vālmīki's *Rāmāyaṇa* contains passages which extol Rāvaṇa,⁶³⁰ a trend which assumes a more pronounced character in later versions of the *Rāmāyaṇa*, for example those composed by Jain authors;⁶³¹ the same phenomenon is visible in Tamil literature.⁶³²

J. Filliozat concluded that Rāvaṇa is one of the numerous ambivalent beings in Indian mythology, to be compared with Rudra. P.C. Bagchi noticed that, in the *Mahāmāyūrī*, Rāvaṇa is also the name of the yakṣa who protects Rāmaṭha, while Kāpiśī is protected by another yakṣa called Laṅkeśvara.⁶³³ T. Goudriaan describes Rāvaṇa as an ambivalent god of diseases and magical protection who may be compared to Skanda and Tumburu.⁶³⁴ In the twentieth century, Rāvaṇa is being raised to the status of an admirable Dravidian hero by many Tamils.⁶³⁵

Date

The *Kumāratantra* is at least older than the eleventh century, since *Cakrapāṇidatta* was acquainted with it, and probably earlier than the tenth century, because a similar text was translated into Chinese by Dharmadeva who went to China in the year 937.

The *Siddhasāra* by Ravigupta

The *Siddhasāra* by Ravigupta⁶³⁶ is the earliest medical treatise of a new type, in which the material on nidāna and cikitsā, together with that on some more general subjects, has been arranged in a more or less systematic way.

Contents

The *Siddhasāra* counts 2,634 lines, which agrees with the author's own statement about the extent of his work (31.37). Each of its thirty-one chapters deals with a different topic or cluster of topics. It is in verse, except for one mantra, and has entirely been composed, not compiled, by Ravigupta, which is highly remarkable, though some lines are so close to verses found in the early saṃhitās that it is hard to believe that they are independent.⁶³⁷ Ravigupta mentions (31.37) as his sources Dhanvantari, i.e., the *Suśrutasamhitā*, and the son of Atri, i.e., the *Carakasamhitā*, but Vāgbhaṭa is conspicuously absent.

The first four chapters deal with general subjects: (1) tantra (describing the eight aṅgas of āyurveda), types of diseases, the qualities of the doṣas, the tastes, types of country, the constitutions, etc.; (2) dravyaguṇa, enumerating the groups of drugs and their actions;⁶³⁸ (3) annapānavidhi, listing medicinal properties of foods and drinks; (4) ariṣṭa, describing prognostic signs. Chapters five to twenty-three enter into those subjects which mainly belong to the realm of kāyacikitsā, though bhagandara and upadāṃśa,

usually regarded as forming part of śalya, are discussed in chapters belonging to this section.⁶³⁹ Chapters twenty-four and twenty-five are concerned with śalya, twenty-six is about śālākya, twenty-seven about viṣa (tantra), twenty-eight about rasāyana and vājīkaraṇa, and twenty-nine about kaumārabhṛtya; bhūtavidya is represented by chapter twenty, concerned with unmāda and apasmāra. Chapter thirty deals with pañcakarman, and chapter thirty-one with kalpa (rasana-, bhallātaka-, and other kalpas).

Therapy is the predominant concern of the *Siddhasāra*, and only a few lines of each chapter are devoted to nidāna. Ravigupta's teachings are embedded in the main current of the āyurvedic tradition and consequently relatively free from divergent features.

Later authors made ample use of the *Siddhasāra*.⁶⁴⁰

Ravigupta and the *Siddhasāra* are quoted by name by numerous medical authors: Āḍhamalla,⁶⁴¹ Ananta,⁶⁴² Arunadatta,⁶⁴³ Bhāradvāja,⁶⁴⁴ Candranandana,⁶⁴⁵ Candraṭa,⁶⁴⁶ Gopāladāsa, Jivānandavidyāsāgara,⁶⁴⁷ Lakṣmīrāma,⁶⁴⁸ Niścalakara,⁶⁴⁹ Rūpanyana,⁶⁵⁰ Śivadāsaśena,⁶⁵¹ Soḍhala,⁶⁵² Śrīkaṇṭhadatta,⁶⁵³ Ṭoḍara,⁶⁵⁴ and Viṣṇudeva.⁶⁵⁵ The *Siddhasāra* is moreover quoted in the *Bāhaṭagrantha*⁶⁵⁶ and in the interpolated portion, written by an unknown author, of Niścalakara's *Ratnaprabhā*. It is mentioned as a source in the *Ratnākaraśādhayogagrantha*.⁶⁵⁷ It is referred to in the anonymous *Vaidyaśāstrapravartakācāryānāmasamuccaya*. The widespread fame acquired by Ravigupta's work is shown by quotations from it in al-Rāzī's *Kitāb al-Ḥāwī*.⁶⁵⁸

Niścalakara indicates in his *Ratnaprabhā* which verses of Cakrapāṇidatta's *Cikitsāsamgraha* were borrowed from Ravi(gupta) and his *Siddhasāra*.⁶⁵⁹

Special features

Pitta is said to be located in the pakvāśaya (1.17–18).

The order of the diseases does not conform to that found in the early saṃhitās and seems to be peculiar to Ravigupta; it was ignored by later authors. A series of disorders and their therapy, specified in the early saṃhitās, are not described in the *Siddhasāra*, such as ajīrṇa, arocaka, kṣataksīṇa, the kṣudrarogas, bhagna, mūtrāghāta, mūrchā, vidradhi, viśūcikā, śūkaroga, śūla, and svarabheda.⁶⁶⁰

The author

Ravigupta mentions, in the beginning and at the end of his treatise, his own name and that of his father, Durgagupta, who was an aśvavaidya from the West. He adds that he wrote the work on the insistence of his elder brother, Devagupta, who suffered from an illness, called paṇḍunāga.⁶⁶¹

Date

Clues to the date of the *Siddhasāra* are provided by its translations into Tibetan,⁶⁶² Khotanese,⁶⁶³ and Uighur,⁶⁶⁴ which testify to its popularity.⁶⁶⁵ As the Khotanese translator was acquainted with the Tibetan version,⁶⁶⁶ the date of the latter, made in the early ninth century, gives us a provisional terminus ante quem.

The ample use made of the *Siddhasāra* by later authors helps to bring down this provisional limit, since several verses were incorporated in the *Mādhavanidāna*⁶⁶⁷ and

Mādhavacikitsā, which date from the eighth century.

The terminus post quem is more difficult to establish, but the date suggested by R.E. Emmerick, ca. A.D. 650,⁶⁶⁸ is acceptable and accounts for the fact that Vāgbhaṭa, who lived about A.D. 600, is not mentioned as a source by Ravigupta.⁶⁶⁹

The *Siddhasāranighaṇṭu*

The *Siddhasāra* is followed by the *Siddhasāranighaṇṭu*,⁶⁷⁰ which is known in two versions, one in verse⁶⁷¹ and the other in the form of a list;⁶⁷² both give synonyms of the vegetable and inorganic substances prescribed in the *Siddhasāra*. The versified nighaṇṭu and the list seem to have influenced each other.⁶⁷³

The *Siddhasāranighaṇṭu* conforms to the old type of nighaṇṭu in giving only synonyms, and not adding the properties and actions of the medicinal substances as in nighaṇṭus of the later type.⁶⁷⁴ It is a work of great importance, since it may be the earliest nighaṇṭu we possess and the only one appended to a rather early medical text.⁶⁷⁵ The nighaṇṭu, though essential for a correct understanding of the *Siddhasāra*, has, to their disadvantage, not always been utilized by the translators.⁶⁷⁶

Interesting is the occurrence of the word *tulasī* (105) in this early work, since this term was regarded as appearing for the first time in the *Paryāyaratnamālā*.⁶⁷⁷

Interesting and rare synonyms are: *jhaṣā* = *nāgabalā* (7);⁶⁷⁸ *kākolī* = *nākulī* (27); *kaṇṭakā* = *mahāśyāmā* = *vṛkṣabhāryā* (123);⁶⁷⁹ *kavuka* = *khapura* (99);⁶⁸⁰ *kulajā* = *surasī* (109);⁶⁸¹ *laṅgaka* = *tripuṭa* (180);⁶⁸² *murūṅgī* = *vāyasī* (147);⁶⁸³ *śaṅkhinī* = *tiktavīryā* = *akṣipīluka* (126);⁶⁸⁴ *saptigandhā* = *aśvagandhikā* (137);⁶⁸⁵ *śaśvatkṣīrī* = *nandivṛkṣa* (18);⁶⁸⁶ *śvetaka* = *dhava* (95);⁶⁸⁷ *vasuvahā* = *rāsnā* (28);⁶⁸⁸ *yavatiktā* = *saptalā* (125).⁶⁸⁹

Date

The date of the *Siddhasāranighaṇṭu* is difficult to determine.⁶⁹⁰ It may have been composed some time after the *Siddhasāra* itself. A terminus ante quem would be established if P.V. Sharma were right in claiming that Vṛnda (about A.D. 900) and Candrāṭa (tenth century) have borrowed from it,⁶⁹¹ but this assertion has not been substantiated.

Some medical treatises with titles containing the word *Siddhasāra* are recorded in MSS catalogues, but these texts have nothing in common with Ravigupta's work. These treatises are: the *Siddhasāratāntra* by Nīśācarabhaṭṭācārya,⁶⁹² the *Siddhasārasaṃgraha*,⁶⁹³ and the *Siddhasārasaṃhitā*.⁶⁹⁴

Tiṣaṭa

Tiṣaṭa⁶⁹⁵ was the author of the *Cikitsākalikā*,⁶⁹⁶ a short medical treatise,⁶⁹⁷ composed in about 400 skillful verses⁶⁹⁸ of diverse metres.⁶⁹⁹

Contents

The *Cikitsākalikā* can conveniently be divided into two unequal parts, the first (3–94) dealing with basic principles of medicine and general aspects of treatment, the second

(99–399) being about the therapy of various diseases.

The work opens with two introductory verses, the first of which is in praise of Sūrya, the Aśvins, Dhanvantari, Suśruta, and Tiṣaṭa's father, while the second refers to Hārīta, Suśruta, Parāśara, Bhoja, Bhela, Bhṛgu, Agniveśa, and Caraka as sources of the *Cikitsākalikā*.

Authorities mentioned in the body of the work are: Āstika (387), the Aśvins (227; 306), Bhela (248), Bhṛguja (i.e., Śukra; 375), Caraka (41; 162; 302; 345), Janakātmaja (i.e., Videha; 347), Kāṅkāyana (147; 151), Parāśara (302), Pracetas (i.e., Varuṇa; 383), Suśruta (145),⁷⁰⁰ and Videha (230; 304). The name of Vāgbhaṭa is conspicuously absent.

Candrāṭa's commentary on the *Cikitsākalikā* also discloses some sources: Caraka (161–162), Hārīta (212–215), and Kṣārapāṇi (208–211). P.V. Sharma is of the opinion that Vṛnda's *Siddhayoga* may also have been put to use by Tiṣaṭa.⁷⁰¹

Verses 4–16 are about the components of the human body. Verses 17–40 deal with the tridoṣa doctrine and contain the famous verses, often quoted by later authors,⁷⁰² on the causes of excitement of each of the three doṣas and the symptoms of this excitement. Verses 48–65 enumerate eighteen groups (*gaṇa*) of drugs and their actions, while 68–85 are concerned with *sneha*, *sveda*, and *pañcakarman*. Verses 87–94 are about general measures of treatment. Verses 95–97 give a list of diseases belonging to the division of *kāyacikitsā*; verse 98 lists the seven remaining *aṅgas* of *āyurveda*.

The remaining part of the work is devoted to therapy. It is divided into sections⁷⁰³ on *kāyacikitsā* (99–325), *śālākyaatantra* (326–352), *śalyatantra* (353–364), *bhūtavidyā* (365–377), *kaumāratantra* (378–380), *viṣatantra* (381–389), *rasāyana* (390–394), and *vājikarāpatantra* (395–399). Tiṣaṭa's arrangement of the diseases in the section on *kāyacikitsā* has no parallel in other treatises.

Authors and works quoting from or referring to Tiṣaṭa or his *Cikitsākalikā* are: Ādhamalla,⁷⁰⁴ Anantakumāra,⁷⁰⁵ the *Āyurvedābhdhisāra* and its commentary, Bhāvamiśra in his *Bhāvaprakāśa*,⁷⁰⁶ the *Bhesajjamañjūsānannaya*, Candrāṭa in his commentary on the *Cikitsākalikā* and in his *Yogarātnasamuccaya*, Gopāladāsa, Gulrājśarmamiśra in his *Viśikhānupraveśavijñāna*, Hariprapanna in his *Rasayogasāgara*, Hemādri,⁷⁰⁷ Karandīkar in his *Nīdānadīpikā*,⁷⁰⁸ Kāśīrāma,⁷⁰⁹ Khare in his commentary on the *Rasarātnasamuccaya*, Nīścalakara,⁷¹⁰ Priyavrat Śarmā in his auto-commentary on the *Dravyaguṇasūtra*, Śivadāsasena,⁷¹¹ Sodhala,⁷¹² Toḍara,⁷¹³ Trimalla in his *Yogatarāṅginī*⁷¹⁴ and *Bṛhadyogatarāṅginī*,⁷¹⁵ Vijayarakṣita in the *Madhukośa*,⁷¹⁶ the *Vīrasimhāvaloka*,⁷¹⁷ the *Yogarātnākara*,⁷¹⁸ and Yogendranātha in the *Āyurvijñānaratnākara*.⁷¹⁹ Harṣakīrti, Jayaratna, and Māgacandradeva mention the (*Cikitsā*)*kalikā* as one of their sources.

A valuable commentary on the *Cikitsākalikā* was written by Tiṣaṭa's son, Candrāṭa.⁷²⁰

Special features

Tiṣaṭa gives a list of diseases to be ascribed to bad acts committed in previous lives (10–12).⁷²¹ The three chief vulnerable parts (*marman*) are said to be the cardiac, ano-rectal and umbilical regions (25).⁷²² The number of eighteen groups of drugs (48–65) is pecu-

liar to Tīsaṭa's work. The first six of them are said to subdue vāta, pitta, kapha, vātapitta, vātakapha, and pittakapha, the eleventh group (elādi) consists of drugs against poison (viṣa), kapha, and vāta. The remaining gaṇas, apart from the fifteenth (varuṇakādi), to be prescribed against a variety of diseases, are well-known smaller groups: triphalā, trikaṭuka, pañcakola, pañcavalka, aṣṭavarga, trisugandhin, caturjātaka, mahat- and laghupañcamūla, and finally daśamūla. The elādi- and varuṇakādigāṇas may have been borrowed from the *Suśrutasamhitā* (Sū.38.24–25 and 10–11), as well as the two pañcamūla groups and the daśamūla group (Sū.38.66–71).⁷²³ Some other gaṇas, namely triphalā, trikaṭuka, pañcakola, trijātaka and caturjātaka, may have been inspired by Vāgbhaṭa (A.h.Sū.6.159–166) according to P.V. Sharma,⁷²⁴ although this author is not referred to as a source by Tīsaṭa⁷²⁵ and clear resemblances cannot be detected.⁷²⁶ Some recipes differ from those in earlier works⁷²⁷ or are based on a compromise after the consultation of various sources.⁷²⁸ Verses 309–325, on prakīrṇausadhāni, contain a list of remedies which are particularly helpful in certain disorders.^{729 730}

The author

Nothing is known with certainty about Tīsaṭa, except that he was the father of Candraṭa, who wrote a commentary on the *Cikitsākalikā*, and, as is evident from the first verse of the *Kalikā* and Candraṭa's comment on it, that he was the son of a physician whose name is not disclosed. The colophons of a number of MSS call Tīsaṭa the son of Vāgbhaṭa.⁷³¹ Tīsaṭa's name may indicate that he was born in Kāśmīr.⁷³²

Candraṭa explains in his commentary that Sūrya, who is praised in the first verse of the *Cikitsākalikā*, was Tīsaṭa's family deity, which makes clear that Tīsaṭa, just like Ḍalhaṇa, was a brāhmaṇa of the Saura tradition.⁷³³

G. Hāldār supposes that Tīsaṭa was also the author of a work called *Vaidyatrimṣat*.⁷³⁴

Date

Tīsaṭa's sources are of no avail in establishing his date, in spite of the statement by Jolly that the occurrence of Bhoja's name in the list of verse two may point to the eleventh century as the terminus post quem for the composition of his work.⁷³⁵ It is quite uncertain who this Bhoja was and when he lived. The colophons of the MSS that call Tīsaṭa the son of Vāgbhaṭa are not helpful either, firstly, because these colophons may date from a later age, secondly, because of the absence of the name of Tīsaṭa's father in the text of the *Cikitsākalikā* and its commentary,⁷³⁶ and, thirdly, since no information is available on the identity of this Vāgbhaṭa. P.V. Sharma's claim that Tīsaṭa made use of the works of Vāgbhaṭa⁷³⁷ is in need of corroboration; his view that Tīsaṭa probably borrowed from Vṛnda's *Siddhayaoga*⁷³⁸ has no firm basis, since the formulae referred to are not closely similar in wording.⁷³⁹ The fact that the arrangement of the diseases in the *Cikitsākalikā* is free from influences from the side of Mādhava's *Rugviniścaya* cannot be used as evidence for a very early date, since many works composed after the eighth century disregard Mādhava's scheme. Nevertheless it is worthy of notice that the new diseases introduced by Mādhava and Vṛnda are absent from Tīsaṭa's work.⁷⁴⁰

The chronological position of the *Cikitsākalikā* can be deduced only from

Candraṭa's commentary. The earliest author, apart from Candraṭa, who is known to have utilized Tīsaṭa's work is Cakrapāṇidatta.⁷⁴¹

The evidence available points to the tenth century as the age in which Tīsaṭa must have lived.⁷⁴²

The *Kalyāṇakāraka* by Ugrāditya

The *Kalyāṇakāraka* by Ugrāditya⁷⁴³ is a comprehensive medical treatise by a Jain author. Other medical works ascribed to him are the *Bhiṣakprakāśa*,⁷⁴⁴ *Jagatsundarī*,⁷⁴⁵ *Kanakadīpaka*,⁷⁴⁶ and *Rāmaṇinoda*.⁷⁴⁷

Contents

The work consists of about 8,000 verses⁷⁴⁸ and some prose,⁷⁴⁹ arranged in twenty-five chapters (pariccheda) and two additional ones. It is also divided into two systems of adhikāras, long and short ones. Chapters one to six constitute the svāsthyarakaṣaṇādhikāra, seven to twenty the cikitsādhikāra, and twenty-one to twenty-five the uttaracikitsādhikāra, uttaratantra or uttaratantrādhikāra. Many chapters are subdivided into short adhikāras devoted to a single disease or to a group of diseases.⁷⁵⁰

The first seven chapters discuss general subjects. After a maṅgala addressed to the first Tīrthaṅkara, Ṛṣabha,⁷⁵¹ the book opens with the Jain version of the descent (avatāra) of āyurveda (1.2–10): the medical science was revealed by Ādinātha (= Ṛṣabha), with the goddess Sarasvatī⁷⁵² as an intermediary, to the first cakravartin,⁷⁵³ Bharata,⁷⁵⁴ and others, when mankind became oppressed by disease in the present avasarpinī,⁷⁵⁵ subsequently, every Tīrthaṅkara⁷⁵⁶ proclaimed this science, until it was acquired by the gaṇadharas,⁷⁵⁷ śrutakevalins⁷⁵⁸ and other holy men, who transmitted it to their pupils.

Chapter one also deals, amongst other things, with prognostics (30–47). Chapter two is concerned with embryology (41–58), three with anatomy (2–12), the constitutions (17–27) and the doṣas (47–68), four with time and the seasons (2–15), grains and pulse (20–26), vegetables and fruits (27–46), five with liquid foods (3–34), urines (35–37) and anupāna (38–42), six with dinacaryā and rātricaryā (1–25), vājīkaraṇa (30–40) and rasāyana (41–67), seven with general subjects relating to therapy.

The section on nidāna and cikitsita covers chapters eight to nineteen. The arrangement of the diseases is peculiar to this text. Chapter eight is concerned with vātaroḡa, including ūrustambha and vātarakta. Chapter nine is about pittaroḡa, i.e., raktapitta, aṣṛgdara, visarpa, vātarakta again (only its therapy), jvara, and atisāra. Chapter ten deals with kapharoḡa, without mentioning specific diseases. Chapters eleven to twelve discuss mahāmaya, the major diseases, which consist of prameha, the pramehapiṭakāḡ, sadyovraṇa, kuṣṭha, udara (chapter eleven), vātaroḡa again (therapy only), mūḡhagarbha and various disorders of pregnancy, bālagraha, and arśas (chapter twelve). Chapters thirteen to eighteen cover what is called kṣudraroga, the minor diseases, in the *Kalyāṇakāraka*, which consist of a very large group of disorders, namely śarkarā, aśmarī, bhagandara, vṛddhi (chapter thirteen), vidradhi, granthi, upadamśa, śūkadoṣa, ślīpada, apacī, nāḡivraṇa, galagaṇḡa, arbuda, śopha, and the group of kṣudrarogas in the stricter sense of the term (chapter fourteen), the diseases

belonging to the division of śālākya, i.e., śiro-, karna-, nāsā-, mukha-, and netraroga (chapter fifteen), śvāsa, kāsa, virasaroga, tṛṣṇā, chardi, arocaka, svarabheda, udāvarta, hikkā, and pratiśyāya (chapter sixteen), hrdroga, krimiroga, ajṛṇa, mūtrāghāta, mūtrakṛcchra, yoniroga, gulma, pāṇḍuroga, mūrchā, unmāda, and apasmāra (chapter seventeen), śoṣa (= kṣayaroga), masūrikā and visphoṭa, bālagraha again, and finally graha (chapter eighteen). Chapter nineteen is about viṣa.⁷⁵⁹

Chapter twenty deals with many subjects, e.g., the sixty therapeutical procedures (4–7), the ten ways of taking a drug (18–21), the combinations of tastes (28), prognostics (30–47), and the marmans (49–83). Chapter twenty-one is concerned with caustics (kṣāra; 9–17), cautery (agnikarman; 18–30), bloodletting by means of leeches and allied topics (33–51), and surgery (52–65). Chapter twenty-two deals with pañcakarman, disorders resulting from improper treatment, and the therapy of these disorders. Chapter twenty-three is about uttarabasti, śukra- and ārtavadoṣa, the care for pregnant women, obstetrics, dhūmapāna, gaṇḍūṣa, kavala and nasya, śoṭha, and the treatment of palita. Chapter twenty-four discusses the processing of mercury and mercurial preparations. Chapter twenty-five deals with a series of kalpas.

The first additional chapter (pariśiṣṭādhyaḥ) describes prognostic signs; the second (hitāhitādhyaḥ) is a long discourse in prose in defense of a vegetarian diet, delivered by Ugrāditya at the court of Nṛpatuṅgavallabha.⁷⁶⁰

Some subjects are discussed twice, such as sveda (8.31–32 and 22.21–29), vamaṇa (8.33–37 and 22.33–41), and nasya (8.68–72 and 23.57–76). Prognostics (arīṣṭa) is a topic discussed in various chapters (1.30–47; 20.30–47; pariśiṣṭādhyaḥ). Surgery has a rather important place in this treatise: 11.51–53, the bandaging of wounds; 12.101–111, the surgical treatment of arśas, i.e., haemorrhoids; 13.53–58, the treatment of bhagandara, i.e., ano-rectal fistulas; 14.30–31, the eight surgical procedures; 15.244–249 and 274–283, treatment of eye diseases, couching of cataract; 20.49–83, descriptions of the marmans.

Religious and magical therapy are of minor importance,⁷⁶¹ but Jain doctrines and practices are referred to frequently.⁷⁶² Each chapter begins with a maṅgala addressed to Rṣabha, Ariṣṭanemi,⁷⁶³ Vardhamāna (= Mahāvīra),⁷⁶⁴ the Tīrthaṅkaras, etc., and ends always with the same verse, referring to the revelation of the medical science by the Jinas. The sections on dravyaguṇa (4.20–46) and the therapeutical prescriptions are characterized by the absence of meat, honey⁷⁶⁵ and alcohol,⁷⁶⁶ in accordance with Jain doctrine,⁷⁶⁷ but substances of animal origin like hair, nails, bones and excrements are freely used.

Inorganic substances regularly form part of medicines. Chapter twenty-four shows a rather advanced stage of alchemy.⁷⁶⁸

The tridoṣa theory is of great importance in the *Kalyāṇakāraka*, but blood is also recognized as a factor causative of diseases.⁷⁶⁹

Ugrāditya's sources have not been investigated,⁷⁷⁰ but he states himself that his work is a shortened version of an extensive treatise on the eight limbs of āyurveda by Samantabhadra (20.86),⁷⁷¹ while the prime source of all medical works is said to be the *Prāṇāvāda* (20.84) or *Prāṇāvāya* (21.3; 25.54).⁷⁷²

Ugrāditya refers to several authorities who were specialists in one of more

branches of āyurveda (20.85): Pūjyapāda⁷⁷³ (śālākya), Pātrasvāmin (śālya),⁷⁷⁴ Siddhasena (agada and bhūtavidyā),⁷⁷⁵ Daśarathaguru (kāyācikitsā),⁷⁷⁶ Meghanāda (kaumārābhṛtya), and Siṃhanāda (vājīkaraṇa and rasāyana).⁷⁷⁷ Other authorities mentioned by Ugrāditya are Jaṭācārya (Śrījāta; 15.290),⁷⁷⁸ Kumāranandin (20.23),⁷⁷⁹ Kumārasena,⁷⁸⁰ Śrutakīrti (20.23),⁷⁸¹ and Virasena (20.23).⁷⁸²

The hitāhitādhyaḥ quotes Caraka (p.715, 724, 725, 726, 738, 744), Kapilamuni (p.722), Kṣārāpāṇi (p.734), Paitāmaha (p.724, 742), and Suśruta (p.716, 717), while also many persons are mentioned who were opponents or advocates of a non-vegetarian diet. The opponents are Paśupati, Brhaspati, Gautama, Agniveśya, Hastacārīn, Vādbali,⁷⁸³ Rājaputra, Gārgya, Bhārgava, Bhāradhvaja, Pālākāpya, Viśāla, Kauśikaputra, Vaidarbhya, Nara, Nārada, Kumbhadatta, Vibhāṇḍaka,⁷⁸⁴ Hiraṇyākṣaka, Pārāśara, Kauṇḍinya, Kāthāyina, Tittira, Taitilya, Maṇḍavya, Śibā, Śibi,⁷⁸⁵ Bahuputra, Arimeda, Kāśyapa, Yājñavalka, Mṛgaśarman, Śābāyana, Brahmā, Prajāpati, the Aśvins, Surendra, and Dhanvantari (p.720); the advocates are Viśvāmitra, Gautama, Kāśyapaputra, Pāṇḍya, Caraka, Bhikṣu and Tāpasa (p.727). Ugrāditya states in the same chapter (p.724–725) that a king of Avanti, called Pṛṣadvant, introduced the slaughter of cows.⁷⁸⁶

The *Kalyāṇakāraka* is quoted in the *Virasimhāvaloka*⁷⁸⁷ and *Revaṇārādhyā's Smarātattvapraśāṅgikā*,⁷⁸⁸ it is referred to in Pūrṇasena's commentary on the *Yoga-sataka*, *Revaṇasiddha's Virabhaṭṭīya*, and Tōḍara's *Āyurvedasaukhyā*.

Ugrāditya is mentioned in the *Vaidyaśāstrapravartakācāryānāmasamuccaya*.

Special features

One of the most conspicuous features is the unprecedented arrangement of the diseases. Noteworthy elements in the field of nosology are, moreover: rakta, vāta and pitta types of aśṛgdara (8.30);⁷⁸⁹ rūkṣa- and snehajvara (8.78–79); the mention of rakaśa (11.64), parisarpa and visarpaṇa (11.67) among the kṣudrakuṣṭha group;⁷⁹⁰ the description of śarkarāśūla (13.5),⁷⁹¹ brhadvraṇa (13.57), and āmaśoṭha (14.29);⁷⁹² the mention of a type of upadāṃśa called vaṃśākhyāśoṭha (14.7);⁷⁹³ the absence of śūkadoṣa types (14.8); the description of the disorder usually called jālagardabha⁷⁹⁴ under the name of jālakāla (14.42); a number of sixty-six mukharogas (15.118);⁷⁹⁵ the description of virasaroga (16.27);⁷⁹⁶ the presence of a raktaja type of svarabheda (16.59);⁷⁹⁷ the dissociation of pratiśyāya (16.87–95) from the nāsāroga group; the absence of the vidvighāta and bastikuṇḍala types of mūtrāghāta,⁷⁹⁸ the absence of the śukraja type of mūtrakṛcchra;⁷⁹⁹ visphoṭa as a variety of masūrikā (18.32); the employment of the term sphoṭamasūrikā (18.50);⁸⁰⁰ the disease which is usually designated as makkalla goes under the name of markala (23.33).

Disorders left unmentioned are pānātyaya, bhagna, and the bālarogas, with the exception of the bālagrahas, as well as all the diseases added by Mādhava, with the exception of visphoṭa and masūrikā, namely āmavāta, śūla, medoroga, śītapitta, amlapitta and yonikanda, and also those added by Vṛnda, namely snāyukaroga and vardhma.⁸⁰¹

Bālagrahas dealt with are: kinnara⁸⁰² (18.71–76), kiṃpuruṣa⁸⁰³ (18.77–81), Garuḍa (18.82–84), Revatī (18.85–88), Pūtanā (18.89–94), Anupūtanā (18.95–99), Śītapūtanā (18.100–104), piśāca (18.105–108), and rākṣasa (18.109–113).

Grahas mentioned are devas, asuras, gandharvas, yakṣas, bhūtapitars, rākṣasas, piśācas, and nāgas⁸⁰⁴ (18.115–126).

The chapter on alchemy (24) mentions three chief processes: parimūrchana, māraṇa and bandhana; the mercurial products resulting from these processes are suitable to the curing of diseases, the acquisition of wealth, and the acquisition of an incorruptible body respectively (3–4). Other subjects dealt with in this chapter are mūrchana and māraṇa (5), bandhana (9), śodhana (13–14), rañjana (15; 39; 42), garbhadruti (16; 26), svedana (17; 42), sārāṇa (35; 39; 42), sārāṇatāila (35), krāmaṇa (36; 54), pratisārāṇa (37; 39), anusārāṇa (38), and vedha (40). A series of eight processes (mahāṣṭakarman) is referred to (43).

The dolāyantra is mentioned (17) and two types of mūṣā, the vajramūṣā (20) and the gostanamūṣikā (32; 33).

The ritual preceding alchemical operations includes paying homage to Jinendra, the Adhidevatās, Yakṣeśvara, Ambikā, Kūṣmāṇḍinī,⁸⁰⁵ the Lords of the three worlds, all the Jinās, and the nine grahas (11–12).

The chapter on kalpas (25) describes kalpas of haritakī (3–4), āmalaka (5), triphalā (6–11), śilājatu (12–23), vāmyeṣā (24), pāṣāṇabheda and bhallāta (25–30), kharparī (31–32), vajra (33–35), mṛttikā (36),⁸⁰⁶ goṣṛṅgī (37), eraṇḍa (38), nāgī (39), kṣāra (40–42), and citraka (43–44).

Ugrāditya distinguishes three groups of vegetables not found in other works: pañcalavaṇiṣaṇa, growing on the seashore, consisting of kukkuṭī, lavaṇī, masūrapattra, rāṣṭrikā, and yugmaparṇī (4.36); pañcabṛhatī, consisting of adhomānini, arka, bṛhatī, citralatā, and vyāghrī (4.37); pañcavallī, consisting of kāravellī, kaṭukikā, mārjārapādī, paṭola, and tiktābimbālatā (4.38).

Remarkable names of medicinal plants used in the *Kalyāṇakāraka* are:⁸⁰⁷ adhomānini (4.37), araka or āraka (19.30), āramodbhavaśiṭālikikā (24.46),⁸⁰⁸ āraṇyālu (4.29), arśoghni (4.29),⁸⁰⁹ bāspotpāda (4.31),⁸¹⁰ bhaṅga or bhaṅgā (16.66),⁸¹¹ bhṛgu (4.34), bhūkarṇī (4.29), bhūkūṣmāṇḍa (6.39),⁸¹² bhūśarkarā (4.29),⁸¹³ bhūśirīṣa (10.11), bṛhacchagalikā (4.31),⁸¹⁴ buja (17.55), cillataru (19.31), citralatā (4.37),⁸¹⁵ dalitā (4.34), dravaṇikā (4.32), goṣṛṅgī (25.37),⁸¹⁶ guhyākṣī (4.33), guptābija (6.39), grdhṛā (4.39), hastikarṇī (4.29; 25.38),⁸¹⁷ jaṅghāruḥā (24.46), jharasī (4.32), kākalatā (18.103),⁸¹⁸ kākavallikā (18.94),⁸¹⁹ kāṇakālī (23.102), kandalakandaka (17.18),⁸²⁰ kaṇikā (4.29),⁸²¹ kāñjira (8.66; 13.65; 13.87), kanyā (4.35),⁸²² kapi (17.55),⁸²³ karavandī (4.42),⁸²⁴ karmaraṅga (4.43),⁸²⁵ kharakarṇikā (25.39),⁸²⁶ kṛtaka (19.30), kṣīrakāñcuka (12.15), kucī (24.5), kuṇḍalatā (4.31), kuṇḍalī (4.29),⁸²⁷ lavalī (11.116; 15.287), lavaṇī (4.33 and 36),⁸²⁸ mācīlatā (4.32),⁸²⁹ mahānīlikā (23.102), mārjārapādī (4.38),⁸³⁰ matsyākṣī (4.34; 9.26; 24.46),⁸³¹ meghaninādikā (24.45),⁸³² muratikā (4.29), nāgī (25.39),⁸³³ namalikā (4.29), nṛtyakāṇḍa (13.32; 16.12), pānikacarī (4.32), pañjikā (4.31), pecu (15.20),⁸³⁴ phaṇī (4.33),⁸³⁵ prabhu (17.55), putrinī (4.32),⁸³⁶ raktāśvattha (6.36), rāṣṭrikā (4.36),⁸³⁷ revatīnetra (4.39), śailabilva (4.44), samkṣīrīṇī (24.45),⁸³⁸ śaravārīṇī (24.44), sarpākṣī (24.44),⁸³⁹ śaśasiras (4.30), śolī (4.34),⁸⁴⁰ śukamukha (14.33),⁸⁴¹ sukhāhva or sukhāhvā (13.87),⁸⁴² talapotaṇka (16.13), tālī (2.29; 18.133), tanvī (23.96),⁸⁴³ taralīkā (4.34), toraṇa (4.44), tulakī (4.44), tumbikā (19.30), urupuṣpa (4.41), vahā (4.31), vajravallī (18.26), vajrī (15.286),⁸⁴⁴ vajrīlatā

(4.30; 18.17), vaṃṣinī (4.34), vāmyeṣā (25.24),⁸⁴⁵ veguṇḍikā (4.33),⁸⁴⁶ vijālinī (15.9),⁸⁴⁷ viṣadalikā (19.30),⁸⁴⁸ and vyāghātaka (10.11).⁸⁴⁹

The author

Ugrāditya⁸⁵⁰ mentions his name twice (25.53 and at the end of the hitāhita chapter) and informs us that he was instructed in medicine by Śrīnandin⁸⁵¹ or Śrīnandyācārya (20.84; 21.3; 25.51), at whose request he wrote the *Kalyāṇakāraka* (25.51–52) on the Rāmāgiri mountain⁸⁵² in Vengi, situated in the country of Trikalīṅga (20.87; 21.3). The name of one of Ugrāditya's colleagues was Lalitakīrti.⁸⁵³

Ugrāditya was a Digambara Jain and belonged to the Deśiṅga, Pustakagaccha,⁸⁵⁴ Pansogavallīśākhā of the Mūlasaṅgha,⁸⁵⁵ of the line of Kundakunda.⁸⁵⁶ The presence of monks belonging to the Deśiṅga in the above-mentioned part of India is proved by a tenth-century inscription from Udayagiri-Khaṇḍagiri.⁸⁵⁷

Date

Ugrāditya states that his teacher, Śrīnandin, was the guru of king Viṣṇurāja Parameśvara (25.51) and that he himself delivered his discourse in defence of vegetarianism at the court of Nṛpatuṅgavallabha Mahārājādhirāja amidst an assembly of learned men (end of the hitāhita chapter).⁸⁵⁸

This Nṛpatuṅga is identified as the Rāṣṭrakūṭa king Amoghavarṣa I (A.D. 814 to about 880);⁸⁵⁹ Viṣṇurāja is identified as the Eastern Cālukya king of Veṅḍī, Viṣṇuvardhana IV (A.D. 764–799),⁸⁶⁰ or Kali Viṣṇuvardhana V,⁸⁶¹ or the father of Amoghavarṣa I, Govinda III (A.D. 793–814).⁸⁶² Hence Ugrāditya may have lived in the Deccan in the first half of the ninth century.⁸⁶³

The remarkable fact remains that no influence from the side of the *Mādhavanidāna* can be detected in his work.⁸⁶⁴ The developed state of alchemy in a treatise from the ninth century can only be explained by assuming that this science originated in Southern India and spread from there to the northern parts of the country much later.⁸⁶⁵

The terminus ante quem depends on the chronological position of Revanārdhaya, who quotes the *Kalyāṇakāraka*; R. Schmidt⁸⁶⁶ was of the opinion that this author may have lived in the thirteenth century at its earliest.

Chapter 2

Authors and works from the period A.D. 1000–1500

The *Abhidhānaratnamālā*

The *Abhidhānaratnamālā*,¹ also called *Ṣaḍrasanighaṇṭu*,² is an anonymous lexicon that only gives synonyms of medicinal substances.³

Contents

The work is arranged in six chapters (skandha), corresponding to the six tastes, madhura, amla, lavaṇa, tikta, kaṭu, and kaṣāya, with respectively 76, 21, 6¹/₂, 110¹/₂, 62, and 107 verses.⁴ This new type of arrangement provided the treatise with its second title.⁵ After enumerating all the items of a group at the beginning of a chapter, the author gives synonyms of each drug. With regard to its contents the work is related to the *Aṣṭāṅganighaṇṭu*.⁶

The *Abhidhānaratnamālā* is quoted by Mallinātha in his commentary on Māgha's *Śiśupālavadha*.⁷

A commentary on the *Abhidhānaratnamālā*, called *Padarocanī*, was written by Venkaṭārya or Venkaṭapattipañḍita.⁸

Special features

Noteworthy names of medicinal plants are: ādārī (4.96a); ajjhaṭā (4.78c); ārāmaśītalā (= kukkuṭamardaka, 4.97ab); brahmadandī (= avākpūspī, 5.59c); brāhmaṇayaśṭikā (= padmā, 4.29b); cānakya (5.31a); ḍolāphala (1.23a); haladī (= haridrā, 4.18ab); huṃkāra (= bahukaṇṭaka, 6.53d);⁹ jalajambū (= nādeyī, 6.23cd); jharasī (4.98cd);¹⁰ jharjvara (6.50ab); kabarī (= kākoli, 1.13ab; = hiṅgupattī, 5.58a); kacchurī (6.62c); khaṭvā (1.51d);¹¹ lavaṇī (= kaṅgunī, 4.53c; = tīkṣṇapattī, 6.72a); mahākadamba (6.56a); maheraṇarasā (= śallakī, 6.56cd–57ab); nadikāntā (= prācibālā, 5.61a);¹² nahikā (= śukanāsā, 4.105cd); papphana (= vṛkadhūmaka, 6.50b); sālāma (5.31c); sidhṛaka (6.51); śṛṅgarīṭī (= poṭagalā, 1.19c); sthalaśṛṅgāṭaka (1.38d); talapoṭaka (6.64d); turyapiṇḍī (6.73a); vajravallī (= śṛṅkhalā, 5.59b); vāsantī (5.55a); vaṭapattikā (= mohini, 4.106); vātaṅgini (6.66); vijayā (= bhaṅgī, 4.74a); yakṣadṛś (= kuberākṣī, 4.28ab).¹³

Rudrākṣa is regarded as a synonym of pārāvata (2.19c).¹⁴ Musk (5.45) and civet (5.46ab) are known to the author of the *Ṣaḍrasanighaṇṭu*. Mercury is elaborately described (6.101–103), but opium is absent.¹⁵

The author

At the end of one MS,¹⁶ the work is said to have been written by the elder brother of Caturaracita (-rakṣita?).¹⁷ More information about the author is not available.¹⁸

Date

The lower limit is provided by the quotations from the *Abhidhānaratnamālā* in Mallinātha's commentary on the *Śiśupālavadha*. Hence the work cannot be later than the early fifteenth century. Its affinity with the *Aṣṭāṅganighaṇṭu* may indicate that it is posterior to about A.D. 800–1000.

Amṛtanandin

Amṛtanandin, a Jain who lived about A.D. 1300, composed the *Akārādi(vaidya)nighaṇṭu*, also called *Dhanvantarinighaṇṭu*.¹⁹

Avadhānasarasvatī

Avadhānasarasvatī,²⁰ of Atri- or Ātreya-gotra, a resident of Makṣikāraṇya in Tuṇḍī-ramaṇḍala,²¹ son-in-law of Kāmeśanātha who was the son of Ekāmraṇātha,²² and father of Venkaṭeśa,²³ wrote (1) the *Prasastauśadhasaṃgraha*²⁴ and (2) a (*Vaidya*)*śataśloki*.²⁵

The *Prasastauśadhasaṃgraha*²⁶ is a collection of recipes in 120 verses. The arrangement of the diseases and some other topics is as follows: jvara (2–3), rakṭapitta (4), pradara (5), asthisrutī in women (6),²⁷ kāsa, śvāsa and hidhmā (7–9), kṣaya (10–11), arocaka (12), vami (13), mūrchā (14), tṛṣṇā (15), saṃnyāsa (16–17ab), arśas (17cd–19), udāvarta (20), atisāra (21–22), grahaṇī (23–24ab), agnimāndya (24cd), viṣūcī (25), prameha (26–27), mūtrakṣcchra (28), pramehapitṭikā (29), aśmarī and śarkarā (30), somaroga (31), vidradhī (32), stanavidradhī (33), vṛddhī (34–36), raktagulma (37), śūla (38), udara (39), pāṇḍuroga (40), kāmālā (41), śoṭha (42), visarpa (43), masūrikā (44), śītapitta (45), kuṣṭha (46–47), śvitra (48), kṛmi (49), vātavyādhi (50–51), pittavikāra (52–53), kaphavikāra (54), vātarakta (55), āvṛti (56–57),²⁸ sthauṛya (58), vandhyātva (59), garbhīṇīroga (60–61),²⁹ bālagrahas (62–63), bhūtas (64), unmāda (65), apasmāra (66), netraroga (67–70), karṇaroga (71–73), nāsāroga (74), oṣṭharoga (75), gaṇḍamālā (76), dantaroga (77), jihvāroga and tāluroga (78), mukharoga (79), śīroroga (80–81), vṛṇa (82–83), sadyovṛṇa (84–85), bhaṅga (86), bhagandara (87), granthī (88), ślīpada (89), arbuda (90), vṛṇa (99), nāḍīvṛṇa (92), kṣudraroga (93–94), upadaṃśa (95), yonīroga (96), sthāvaraviṣa (97), jaṅgamaviṣa and sarpaviṣa (98–100), kīṭaviṣa (101), vṛścīkaviṣa (102–103), lūtaviṣa (104), unduruviṣa (105), alarkaviṣa (106), nakhadantaviṣa (107), vyaṅga and lāncana (108), koṭha (109), vājīkaraṇa (110–112), rasāyana (113–115), general prescriptions (116–118).

This order does not agree with that of the *Mādhavanidāna*, but may have been influenced by the arrangement found in the works ascribed to Vāgbhaṭa.

The *Śatasloka* is described as a short treatise of 126 verses on simple ways of curing diseases³⁰ or as a manual of materia medica.³¹

Since Ekāmrānātha lived in the fourteenth century, Avadhānasarasvatī can be assigned to the later part of the same century or the beginning of the fifteenth.³²

Ballāladeva

Ballāladeva was the author of a *Yogamuktāvalī*³³ in 759 verses. He did not adopt Mādhava's arrangement of the diseases. The treatment of masūrikā and śitalikā is dealt with in his work.³⁴

The author is supposed to be identical with Ballāladeva, a famous king of the Sena dynasty of Bengal.³⁵ This king, usually called Ballālasena, and his son, Lakṣmaṇasena, are credited with five works on dharmaśāstra and related subjects; well-known is their *Adbhutaśāgara*, a treatise on omīna and portenta.³⁶ Ballālasena's literary activity must be placed in the third quarter of the twelfth century.³⁷

A *Vaidyakasārasaṃgraha* is attributed to an author of the name Ballāla.³⁸

Bharadvāja

Bharadvāja is the reputed author of (1) *Bheṣajakalpa*, (2) *Bharadvājakalpa*,³⁹ (3) *Bhāradvājīya* or *Bharadvāja*,⁴⁰ and (4) *Rasapradīpikā*.⁴¹

The *Bheṣajakalpa*,^{42 43} attributed to Bhāradvāja,⁴⁴ is, as its name implies, a treatise on pharmaceuticals.

Contents

The text of the *Bheṣajakalpa*, which formed part of a larger work called *Āyurvedasu-dhānidhi*,⁴⁵ has 525 verses⁴⁶ and deals with many aspects of Indian pharmaceuticals.

The main subjects are: the types of country (3–10); the varieties of soil according to the mahābhūta which predominates in it (11–23ab); rules for the collection of drugs (23cd–45); drugs consisting of bulbs or tubers (46–48ab), roots (48cd–50ab), root bark (mūlatvac; 50cd), bark (dārutvac; 51–52ab), heartwood (sāra; 52cd–53ab), leaves (53cd–57ab), flowers (57cd–59ab), fruits (59cd–61), seeds (62–65), caustics (kṣāra; 66–69), milky juice (70), resinous substances (niryāsa; 71–73), and whole plants (sarvāṅga; 74–75), time limits for their use (78cd–80ab) and rules for their preservation (80cd–82); the construction of an ārogyaśālā and the erection of images in it (83–102ab); series of drugs to be employed when still fresh (102cd–104) and roots to be used together with or without their bark (105–108ab); substitutes for particular drugs (108cd–131); weights and measures (132–217); the five types of kaṣāya (218–312ab); medicinal oils and fats (312cd–386); the preparation of haritakī fruits (abhayāpāka; 463cd–494); the purification of guggulu (495–499ab); the preparation of caustics (499cd–508); general rules for the administration of medicines (509–524).

Names of authorities referred to or quoted are Ātreya (216; 412cd–413ab),

Bhāluki (260), Bhoja (215; 261–270), Caraka (177), Kharanāda (187), Kṛṣṇātreya (276cd–283), Ravigupta (286cd–287), Śālihotra (163cd–165), Śaunaka (313b–331), and Suśruta (186; 284–286ab; 361cd–362).

A *Bheṣajakalpa* is mentioned as a source in the *Basavarājīya* and *Ratnākara-śadhayogagrantha*.⁴⁷ A *Bheṣajakalpa* is referred to in Revanāsiddha's *Virabhaṭṭīya*.

Veṅkaṭeśa, the son of Avadhānasarasvatī,⁴⁸ of Ātreya gotra,⁴⁹ who lived in the fifteenth century, wrote a commentary on the *Bheṣajakalpa*.⁵⁰ This commentary is said to quote from numerous authorities, such as Bhāluki, Bhoja, Caraka, Kṛṣṇātreya, Śaunaka, Suśruta, and others.⁵¹ The same Veṅkaṭeśa composed a medical treatise called *Praśnottararatnāmālā* and a work on metrics called *Vṛttaratnāvalī*.⁵²

Maṅgalagiri Sūri, of Gelavaṅgala family and Ātreya gotra, son of Jagannātha, wrote a commentary on the *Bheṣajakalpa*, called *Sarvāṅgasamjivānī*, but also sometimes referred to as *Bheṣajakalpasthāna* or even *Kalpasthāna*.⁵³

Special features

The sādharmaṇa type of country is divided into two varieties according to the predominance of jāṅgala or ānūpa elements in it (10); the rules about doubling the quantity of fluids in recipes are elaborately described according to the views of several authorities (170cd–202); two varieties of fluid substances (sāma and nirāma) are distinguished (199cd–202), because the rules for doubling the quantity do not apply to the second variety; a māgadhā type of prastha is mentioned, used in human medicine, and a laukika one, measuring only half of it, which is employed in veterinary medicine (208cd–211ab); the kāliṅga measures are absent; the number of palas making one prastha is moreover said to depend on the type of substance employed (211cd–217); religious rites which should accompany the preparation of medicines are often described (240–243ab; 339–344; 364cd–373ab; 377cd–388); two varieties of aṣṭa are described, lehya and peya (390cd–391); astrological elements are prominent among the rules for determining the appropriate time of ingesting a medicine (520–524).

Noteworthy substances of the materia medica are: apenaka (73), arimedadvaya (73), balāpācika (48),⁵⁴ barbara (124), barbarā (48),⁵⁵ barbaradvandva (68),⁵⁶ barbaradvaya (115), bhañjī (54),⁵⁷ brahmabhūruha (114),⁵⁸ harimañjarikā (53),⁵⁹ jhili (53),⁶⁰ kimpśukadvandva (51), lakṣmīrdvitaya (56), lavaṅga (51),⁶¹ lavaṇī (55), mehāri (72),⁶² nagnajit (62),⁶³ patrasnuh (70),⁶⁴ puṣya (57),⁶⁵ śaṅkhinīyugma (63), sinādikā (112),⁶⁶ śvetabarbara (124), śyonāka and kaṭvaṅga as two different plants (50–51), takkola (64), talapoṭa (55),⁶⁷ toraṇa (61),⁶⁸ upānadaṅghri (54),⁶⁹ varakanyā (67), varakanyakā (70), and varāla (59 and 110).⁷⁰

The author

Some medical works may have been ascribed to Bharadvāja because an ancient sage of this name is mentioned in the *Caraka*-, *Bhela*-, and *Kāśyapaśamhitā*, as well as in the *Aṣṭāṅgasamgraha*, but the works attributed to him must have been composed or compiled at a much later date than those mentioning Bharadvāja as an ancient authority.

Date

Since the *Bheṣajakalpa* (73: aphenaka) and the *Rasapradīpikā* (chapter two) both mention opium, it is impossible to assign these works to a period much anterior to about 1200. The reference to a group of five balās (balāpañcaka: 10) and other features of the materia medica of the *Bheṣajakalpa* seem to confirm this upper limit, while the lower limit is provided by the date of Veṅkaṭeśa's commentary.

Bhoja

Bhoja is credited with the following medical works: (1) *Cārucaryā*,⁷¹ (2) *Rājamārtaṇḍa*,⁷² (3) *Rājamṛgāṅka*,⁷³ (4) *Āyurvedasarvasva*,⁷⁴ (5) *Viśrāntavidyāvinoda*,⁷⁵ and (6) *Rasarājamṛgāṅka*.⁷⁶ A *Bhojarājanighaṇṭu*, recorded by some authors,⁷⁷ appears to be the same as Bhoja's *Nāmamālikā*,⁷⁸ which is not a nighaṇṭu in the medical sense. A treatise called *Śālihotra*, attributed to Bhoja, deals with horses.⁷⁹ An *Āyurvedarasāyana*,⁸⁰ *Vaidyasamgraha*⁸¹ and *Yogasārasamgraha*⁸² are also attributed to Bhoja.⁸³

(1) The *Cārucaryā*^{84,85} is a treatise on personal hygiene and daily regimen (dina- and rātrīcaryā, with some elements of ṛtucaryā), intended for use by the royal court.⁸⁶ The author makes clear that his work will deal with elements of nīti-, vaidya-, and dharmasāstra.⁸⁷

The number of verses in the MSS and editions varies considerably.⁸⁸ The majority of the stanzas are in anuṣṭubh metre, but longer metres are occasionally also employed.⁸⁹

A considerably enlarged version of the *Cārucaryā*, represented by a Mysore MS, has been current in Southern India.⁹⁰

The following subjects are dealt with: saucavidhi (micturition and defecation early in the morning; 2), prātaḥkāladarśanāni (auspicious things to be seen first on getting up; 3–4),⁹¹ dantadhāvanavidhi (brushing the teeth; 5–44), gaṇḍūṣavidhi (the use of gargles; 45–49), netrapañcāmṛta (hygiene of the eyes; 50), abhyaṅga (the application of oils to the body; 51–82), snānavidhi (bathing; 83–91), udvartana (massage; 92–93), anuṣṭhānāni (religious observances after bathing; 94–98), vastradhāraṇa (the wearing of different types of clothing; 99–146), bhūṣaṇadhāraṇa (the wearing of ornaments; 147–172), puṣpadhāraṇa (the wearing of flowers; 173–238), lakṣmīkarāṇi (things leading to prosperity; 239–243),⁹² alakṣmīkarāṇi (things leading to misfortune; 244–256), lepa (unguents; 257–332), bhojana (articles of food; 333–380), ambupāna (the drinking of water; 381–419), dhātupariṇāma (metabolic changes of food; 420–432), pātra (vessels; 433–457); the tāmbūlādhikāra (458–603) is on betel chewing, the prakīrṇādhikāra (604–665) on various subjects (mirrors, fans, vehicles, beds, incense, etc.), and the strīsevāprakaraṇa (666–736) on sexual intercourse; the last section, called nītivākyāni (737–784) is about general rules of conduct.

The text of the *Cārucaryā*, as established by B. Rama Rao, cannot possibly be regarded as the original one, since it quotes the *Bhāvaprakāśa* (724–728),⁹³ dating from the sixteenth century. The only other treatise quoted by name is the *Samgraha* (509), probably the *Aṣṭāṅgasamgraha*, whereas citations from unspecified sources,

introduced by anyat, anyamataṁ, granthāntare, matāntaram, matāntare, and pāthāntare are quite numerous. Some of these unspecified quotations recur in the *Bhāvaprakāśa*.⁹⁴

Bhoja's *Cārucaryā* is quoted by Rāmacandra Budhendra in his commentary on Bhartṛhari's *Subhāṣitatriṣaṭi*.⁹⁵ Several texts contain verses found in the *Cārucaryā* or very similar ones.⁹⁶

A *Cārucaryā* ascribed to Dhanvantari⁹⁷ may prove to be the same as that by Bhoja.

(2) The *Rājamārtaṇḍa*^{98,99} is a yogasamgraha, a collection of therapeutic prescriptions, mostly consisting of a restricted number of vegetable drugs.¹⁰⁰

The work contains 405 verses in various metres, arranged in thirty-four short chapters (adhikāra). The order of these chapters, each of which is concerned with a disease or group of diseases, is peculiar to this work. Chapters on śālākya come first (1–5), followed by kāya and śalya (6–27), bhūtaavidyā (28), agadatantra (29), kṣudraroga (30), kaumārabhṛtya (31–32), rasāyana and vājikaraṇa ((33), and finally paśuroga (34). Noteworthy is the absence of rasayogas among the recipes.

The *Rājamārtaṇḍa* is quoted by Anantakumāra (under the title *Rājamārtaṇḍīya*),¹⁰¹ Rājeśvaradatta Miśra in his *Svasthavyāttasamuccaya*, Rāmacandra in his *Rāmavinoda*,¹⁰² Śivamiśra in his *Vaidyaśāstraśivānubhava*, in Trimalla's *Yogataraṅgiṇī*¹⁰³ and *Bṛhadयोगतराङ्गिणी*,¹⁰⁴ and in the *Yogarātnākara*.¹⁰⁵ Bhoja's *Rājamārtaṇḍa* is one of the sources of Hariprapanna's *Rasayogasāgara*. One verse is found in the *Rasarāttasamuccaya*.¹⁰⁶

A separate chapter is devoted to stanaroga (6); it also contains prescriptions which make the female breasts firm and large. Separate chapters deal with pādaroga (23), and with carmakila, together with maṣa (24). The chapter on kṣudraroga (30) does not form part of the series on śalya. The chapter about eye diseases has also verses on kāmālā (3.18–20), that about diseases of the oral cavity and throat (mukharoga) on gaṇḍamālā (5.29–30 and 32) and apacī (5.31), that about udara has a verse on kṛmi (7.7), and that about vātāroga on asthibhaṅga (22.5). The new diseases, described for the first time by Mādhava, Vṛnda and Vaṅgasena, are for the greater part absent, apart from śītapitta (8.12). The disease called śītalikā is mentioned in the kṣudraroga chapter (30.2–5). The kuṣṭha chapter contains a prescription against aṅghridadru, a mycotic affection of the feet (8.3), and one against rakasa (8.4). The disease, usually called vṛddhi, goes under the name kuraṇḍa (17.1 and 5–7). Rather unusual is the addition of a chapter on veterinary science (34),¹⁰⁷ dealing with disorders in cows, buffaloes, horses and mules, and with determining the colour of the offspring of pigeons. A similar chapter forms part of the *Haramekhalā*. Both works refer to a disease in horses and mules called jalasphoṭa in the *Rājamārtaṇḍa* (34.14) and vārisphoṭa in the *Haramekhalā* (4.411).

Noteworthy names of plants¹⁰⁸ are ārmasārgālikā (31.39),¹⁰⁹ asthisamghātikā (22.5),¹¹⁰ āvallikā (26.13),¹¹¹ babbūla (14.1),¹¹² bhūkuruvaka (34.11),¹¹² cakrāṅka (3.9),¹¹³ gopālāpīṭha (26.8),¹¹⁴ goṣṭhāmlīkā (26.8),¹¹⁵ goṣṭhivallī (24.2),¹¹⁶ jhīṇjhiṇīkā (5.34),¹¹⁷ kanthārikā (29.21),¹¹⁸ māyāphala (31.44), svarṇagandhā (5.21), udumbaraparnī (31.15),¹¹⁹ and uttarīṇī (31.22).¹²⁰ Opium and Cannabis appear to be absent.

(3) The *Rājamrgāṅka*¹²¹ is a work dealing with taila, lehya, cūrṇa, etc.¹²² It is referred to as a work on medicine by Bhoja in the introduction to the *Bhojavṛtti* on the *Yogasūtras*.

A quite different *Rājamrgāṅka* of Bhojarāja is an astronomical treatise.¹²³

(4) The *Āyurvedasarvasva* of Bhojarāja is quoted in Trivikrama's *Lauhapradīpa*.¹²⁴

(5) The *Viśrāntavidyāvinoda*¹²⁵ is said to be quoted by Bhāvamīśra.¹²⁶

(6) The nature and contents of the *Rasarājamrgāṅka*¹²⁷ are unknown.¹²⁸

The author and his date

At least two medical authors with the name of Bhoja should be distinguished: firstly an ancient authority quoted by many commentators,¹²⁹ and, secondly, the author who is usually called Bhojarāja and to whom the works are ascribed which were dealt with above.

The later Bhoja is often thought to be king Bhoja of the Paramāra dynasty, the famous patron of learning, who reigned at Dhārā (about A.D. 1000–1055) and to whom more than thirty Sanskrit technical works are ascribed.¹³⁰ It cannot be established whether at least some of these works were written by the king himself or all of them fathered upon him. Bhojarāja has also been identified with Bhoja of Chitor, who lived in the second half of the seventh century.¹³¹ A third Bhoja, of the Pratihāra dynasty, had his capital at Kānyakubja in the ninth century.¹³²

The medical works attributed to Bhojarāja may be assigned to about the eleventh century, the age of Bhoja of Dhārā, as an earlier date disagrees with the contents and materia medica of the *Rājamārtanḍa*.¹³³ The date of Appana's rendering of the *Cārucaryā* shows the thirteenth or fourteenth century to be the terminus ante quem of this work.

P. Hymavathi¹³⁴ developed the view that the Bhojarāja who was the author of the *Cārucaryā* may be the same as a poet Bhoja who was a contemporary of Divākara Sūri, the father of Lolambarāja, who lived towards the close of the thirteenth century.¹³⁵ The addition of rāja to the proper name was a common practice among brāhmaṇa scholars in Āndhra during this period. P. Hymavathi suggests that the *Cārucaryā* has been composed in the middle of the thirteenth century. He regards the *Nitibhūṣaṇa*, written in Telugu, as a work by the same author, written in this very time, because it is quoted by Maḍiki Siṅgana, who lived towards the end of the thirteenth century, in his *Sakalanīṭisammatamu*. A third work by the same Bhoja is, according to P. Hymavathi, the *Rāmāyanaṇacampū*, written in Sanskrit.¹³⁶ Finally, P. Hymavathi suggests that Bhoja's patron may have been Gaṇapatiśrī (A.D. 1198–1261)¹³⁷ or his daughter Rudrāmbā (Rudramadevī)¹³⁸ of the Kākātīya dynasty, or some feudal lord.

Bhojarāja is quoted in Anantakumāra's *Yogarātnasamuccaya*, Śivadāśena's commentary on the *Cakradatta*,¹³⁹ and Trivikrama's *Lauhapradīpa*.

A recipe attributed to Bhojarāja is found in the *Kāmaratna*.¹⁴⁰

Cāmuṇḍa

Cāmuṇḍa¹⁴¹ was the author of (1) *Jvaratimirabhāskara*, (2) *Rasasaṃketakalikā*,¹⁴² (3) *Rasendratilaka*,¹⁴³ (4) *Varṇanighaṇṭa*, and (5) *Vibhramāḍambara*.

(1) The *Jvaratimirabhāskara*¹⁴⁴ is a monograph on fevers.

The treatise consists of about 1,380 verses, arranged in sixteen chapters (adhyāya). Chapter one (jvaraprabhedha; seventy-four verses) deals with the mythical origin of fever (5–9ab), its names in a great variety of living beings and some lifeless substances (9cd–16), its general aetiology and symptomatology, its varieties and its aṣṭas.

Chapter two (nāḍikādhedha; fifty-eight verses) describes the examination of the pulse (1–14) and the urine (16–26) in fever patients, the first stage of fever (taruṇajvara) and its treatment (34–58) by means of reducing measures (laṅghana).¹⁴⁵

Chapter three (auśadhādhedha; ninety-two verses) is about certain, chiefly fluid, medicinal preparations (kvātha, yavāgū, yūṣa, etc.), to be administered to patients with a fresh fever; chapter four (sādhārāṇajvaracikitsā; thirty-seven verses) is about the general treatment of fevers with medicines.

Chapter five (vātādijvara; ninety-nine verses) is concerned with the symptoms and therapy of fevers caused by one doṣa, and chapter six (dvandvajavaracikitsā; sixty-five verses) with fevers caused by two doṣas.

Chapter seven (saṃnipātajvaraprabhedha; 358 verses), the longest of the whole treatise, describes, after a general section on fevers caused by the three doṣas when acting concertedly (1–56), the symptoms and therapy of three series of thirteen varieties of these fevers. The names of all these fevers are enumerated (57–64), followed by their symptomatology and treatment. The first series consists of viśphāraka, śighrakārin, puṣkalaka, vidhu, makarin, phalgu, vaidārikakarṇāhva, karkoṭaka, saṃmohaka, yāmya, krakaca, pākala, and kūṭapākala (65–140).¹⁴⁶ The members of the second series are sandhiga, antaka, rugdāha, cittabhrama, karṇaka, kaṇṭhakubja, śītagātra, tandrika, pralāpaka, raktaśthivīn, bhugnanetra, jihvaka, and abhinyāsa¹⁴⁷ (183–305).¹⁴⁸ The third series consists of antardāha, antaka, kumbhīpāka, paurṇāṇava, pralāpīn, eṇīdāha, bhūtahāsa, ajaghoṣa, hāridraka, saṃśoṣin, saṃnyāsa, yantrāpīḍa, and daṇḍapāta (308–337);¹⁴⁹ a fever called sughoraka (333–347ab)¹⁵⁰ is regarded as a variety of saṃśoṣin.

Chapter eight (āgantujvara; thirty-six verses) is about fevers caused by a trauma and by the seven types of abhiṣaṅga, i.e., by grahas, anger, strong-smelling herbs, poisons, grief, lust, and fear; a fever arising from curses is added at the end.

Chapter nine (satatādijvaraprabhedha; 138 verses) is concerned with the five irregular fevers which are usually distinguished (saṃtata, satata, anyedyuṣka, tṛṭiyaka, caturthaka), together with the reversed (viparyaya) types of the last four of the series; it adds two irregular fevers, recurring respectively every fifth (pañcāhasaṃbhava; 84–85ab) and every sixth day (ṣaṣṭhadinodbhava; 85cd–87);¹⁵¹ vātabalāsaka (88–89) and pralepaka fever (90–92) are also dealt with in this chapter, as well as fever arising from the pollen of grasses, i.e., hay fever (tṛṇapuṣpaka; 93–97ab),¹⁵² and fever from the loss of ojas (97cd–100ab).¹⁵³ The therapy of the irregular fevers is found at the

end of the chapter (100cd–138).

Chapter ten (*śītadāhādi*prabheda; sixty-four verses) is about irregular fevers, caused by two *doṣas*, which are characterized by coldness (*śītajvara*; 1–22) or a burning sensation (*dāhajvara*; 22–32); these fevers are said to find their origin in evil deeds committed in previous lives; fevers beginning with a feeling of coldness (*śītādi*jvara; 33–34) or a burning sensation (*dāhādi*jvara; 35–36) are also found in this chapter, as well as those in which the body is partly cold, partly warm (the *nṛsiṃha* and *ardhanārīśvara* types, 37–42; the *antardāha* and *bahirdāha* types, 43–46ab); the chapter ends with a fever that especially occurs during the night (*rātrijvara*; 46cd–49).¹⁵⁴

Chapter eleven (*dhātugatajvara*prabheda; forty-one verses) deals with fevers affecting the seven tissues of the body, and chapter twelve (*jīrṇajvaracikitsā*; sixty-six verses) with fevers of long standing.

Chapter thirteen (*śodhanādi*prabheda; eighty verses) is about a number of therapeutic measures: *śodhana*, *pañcakarman*, *pācana*, *sneha*, *sveda*, *vamana*, *virecana*, *nasya*, *basti*, *nirūha*, *anuvāsana*, *varti*, *agnikarman*, and *agada*; it ends with religious therapy (*dāna*, *mantra*).

Chapter fourteen (*dvādaśa*prabheda; one hundred verses) describes the symptoms and treatment of twelve fevers: *ajīrṇajanita*-, *dr̥ṣṭija*-, *raktaja*-, *malajanita*-, *garbhīṇi*-, *sūtikā*-, *stanarogabhava*-, *bāla*-, *visphoṭa*-, *śītalā*-, *krīmija*-, and *kāljvara*.¹⁵⁵

Chapter fifteen (*nakṣatrādi*jvara)prabheda; thirty verses) deals with the influences of the lunar mansions (*nakṣatra*) on the outcome of fever (1–5), the four types of *kāljvara* (*raudra* = *brāhmaṇajvara*; *māhendra* = *kṣatriyajvara*; *iśvara* = *vaiśyajvara*; *kālagambhīra* = *śūdrajvara*; 6–18), which can be treated with religious measures only,¹⁵⁶ with the signs of release from fever (19–20ab), the causes of its reappearance (23–26ab), and finally with religious observances which avert all kinds of fever (26cd–30).

Chapter sixteen (*upadravādi*prabheda; 41 verses) is about the ten complications (*upadrava*) of fever (*atisāra*, *vami*, *hikkā*, *śvāsa*, *kāsa*, *aruci*, *tr̥ṣṇā*, *murchā*, *vibandha*, *agnisāda*), which are described as its relatives.¹⁵⁷

The above list of contents shows that Cāmuṇḍa arranged his treatise very systematically. This also emerges from his descriptions of treatment. The therapy of the fevers caused by one *doṣa* forms a fine example of his method: details about the drinking of water are given first, followed by prescriptions regarded as *pācana*, *śamana* and *śodhana*, while *rasayogas* appear at the end. The verses on therapy of each chapter are divided into two groups, those comprising the usual *āyurvedic* preparations and those containing *rasayogas*. The recipes of the former group are partly simple, partly complicated, and sometimes provided with names, while those of the latter are usually provided with names.¹⁵⁸ The *materia medica* is almost devoid of conspicuous features. Religious elements, mantras included, are not infrequent in Cāmuṇḍa's therapy.¹⁵⁹

Sources are hardly referred to: Caraka, Garga, Suśruta, and *Vṛddhasuśruta* are each mentioned once.¹⁶⁰ Since a number of verses found in the *Jvaratimirabhāskara* also form part of Śārṅgadharā's *Triṣaṭi*,¹⁶¹ the latter work has probably been used by Cāmuṇḍa.

The *Jvaratimirabhāskara* is quoted in Ananta's *Pratāpakalpadruma*, Jayaratna's

Jvaraparājaya, and Pratāpasimha's *Amṛtasāgara*. A work of the same title is mentioned in an *Auśadhikalpa*.¹⁶²

The method of examination of a patient called *aṣṭasthānaparīkṣā* was already known to Cāmuṇḍa, as appears from the beginning of chapter seven (5–10),¹⁶³ where the eight elements of this procedure are referred to, although the term itself is not yet employed.¹⁶⁴ Most of the *saṃnipāta* fevers of the second series are twice described, apparently according to two different sources.¹⁶⁵ The fever called *hāridraka* is described twice as well (7.316–320ab);¹⁶⁶ the series of fevers to which *hāridraka* belongs is said to be contagious, and fatal if provided with the complete set of symptoms (7.321cd–322); nevertheless some verses on the therapy of *hāridraka* have been incorporated in the treatise (7.325–331).¹⁶⁷ The *sughoraka* fever (7.333–346ab) is not known from other sources. It is described twice. The second and more elaborate description, said to have been taken from some other work, constitutes a conversation between Sūrya and the *Aśvins*. The former declares that this fever arose out of Rudra's wrath at the time of Dakṣa's sacrifice. Its five varieties are called *brāhmaṇa*, *kṣatriya*, *vaiśya*, *śūdra*, and *cāṇḍāla*. The *brāhmaṇa* fever is easily curable, the *kṣatriya* type curable with difficulty, the *vaiśya* fever even more so, while the *śūdra* and *cāṇḍāla* types are incurable. Two ways of treatment are recommended: firstly treatment by means of gifts, meritorious deeds, and paying homage to Rudra and Bhavānī, secondly by means of medicines. The verses on *vātabalāsaka* (9.88–89) mention that some authorities regard it as identical with the variety of jaundice called *kumbhakāmalā*.¹⁶⁸ The *pralepaka* fever is said to occur especially in patients with (*rāja*)*yaḥkṣman* (9.90–92).¹⁶⁹ A fever caused by unwholesome water is referred to incidentally (*vāridoṣa*; 11.32). The therapy of *śītalā*, also called *pūrvāpara*, consists mostly of purely medical measures (14.73–87).¹⁷⁰

Some noteworthy names of medicinal plants are *aileya* (4.28),¹⁷¹ *ākallaka* (7.45), *bhadrotkaṭa* (14.24),¹⁷² *cillaka* (3.73), *dāsī* (11.14),¹⁷³ *gārgī* (7.234), *pillaka* (3.73), and *poī* (3.73).

(2) The *Varṇanighaṇṭa*¹⁷⁴ appears to be a vocabulary of Tantric terms.¹⁷⁵ This work is referred to in Śrīvallabhagaṇi's commentary on the first verse of Hemacandra's *Nighaṇṭuśeṣa*.¹⁷⁶

(3) The *Vibhramaḍambara*¹⁷⁷ is a work on magical tricks (*kautuka*).¹⁷⁸

The author

Cāmuṇḍa¹⁷⁹ or Caṇḍa¹⁸⁰ was a Naigama¹⁸¹ *kāyastha*,¹⁸² son of Kumbha,¹⁸³ who was a *karāṇavīra*,¹⁸⁴ i.e., a superintendent of the department of accounts and records of a king, who may have been the famous Mahārāṇā of Mewār, who was also called Kumbha. Like his father, Caṇḍa lived in Mewār,¹⁸⁵ holding the same office¹⁸⁶ at the court of the Mahārāṇā in Yoginipattana¹⁸⁷ or Yoginipura,¹⁸⁸ where he composed the *Rasasaṃketakalikā*¹⁸⁹ and *Jvaratimirabhāskara*.¹⁹⁰

Date

The *Rasasaṃketakalikā* was completed in A.D. 1474,¹⁹¹ the *Varṇanighaṇṭa* in 1482,¹⁹² and the *Jvaratimirabhāskara* in 1489/90,¹⁹³ 1490,¹⁹⁴ or 1492.¹⁹⁵ All three works were written during the reign of Rājamalla,¹⁹⁶ one of Kumbha's sons.¹⁹⁷

Cārucandrasūri Rudrapallīya

Cārucandrasūri Rudrapallīya wrote a medical treatise, called *Vātasīta*, in the latter half of the fourteenth or first half of the fifteenth century.¹⁹⁸

Dāmodara

Dāmodara's *Ārogyacintāmaṇi*¹⁹⁹ is a comprehensive treatise on classical āyurvedic lines. It has erroneously been regarded as a commentary on Suśeṇa's *Āyurvedamahodadhi*.²⁰⁰

Contents

The work, almost exclusively written in verse, is arranged in thirty chapters (adhyāya), to which three more are added, as well as four pañcīṣṭha chapters. The total number of stanzas is about 1,950.

Chapters one to seven cover the subjects usually dealt with in the sūtrasthāna of a saṃhitā. After a maṅgalācaraṇa devoted to Śiva, the author states that his *Ārogyacintāmaṇi* is based on the words of Caraka and others. Chapter one is concerned with paribhāṣā, dinacaryā, ṛtucaryā, and doṣavijñāna. Chapter two is about the tastes and articles of food, chapter three about the groups of medicinal substances and their actions, paribhāṣā, weights and measures, and lohamaṇḍūramāraṇa. Chapter four deals with sneha and sveda, chapter five with pañcīṣṭha, chapter six with dhūmapāna, gaṇḍūṣa and kavala, pratisāraṇa, śirobasti, karpūraṇa, tarpaṇa, and sirāvidhi. Chapter seven is about ariṣṭas. The colophon refers to this group of chapters as the Sūtraśārīrākhyasthāna of Dāmodara's *Ārogyacintāmaṇisaṃhitā*, but the matter usually treated in a śārīrasthāna is absent.

Chapters eight to twenty-four comprise, according to their last colophon, the two sthānas about nidāna and kāyacikitsā. The order in which the diseases and their treatment are described is peculiar to this text: jvara and jvarātisāra (8), atisāra, grahaṇī, pravāhikā and kṛmiroga (9), arśas (10), ajīrṇa (11), raktapitta and asṛgdara (12), prameha, pramehapiḍikāḥ, mūtrakṣcchra and aśmarī (13), kṣayaroga (14), kāsa, śvāsa and hikkā (15), svarabheda and arocaka (16), chardi, tṛṣṇā and mūrchā (17), pāṇḍuroga, halīmaka and kāmālā (18), vidradhi and gulma (19), udara (20), udāvarta, śūla, hṛdroga and amlapitta (21), vātaroga, ūrustambha, ānavāta and vātarakta (22), kuṣṭha, śvitra, śītapitta and udarda (23), śopha, ślīpada and sṭhalya (24).

Chapter twenty-five, concerned with śālākya, is about netra-, karṇa-, nāsā-, mukha- and śīroroga, to which palita, indralupta and dāruṇa are added. Chapter twenty-six, concerned with śalya, deals with vraṇa, bhagandara, upadamśa, granthi, galagaṇḍa, gaṇḍamālā, apaci, arbuda, lūtāvraṇa, jālagardabha, visphoṭa, masūrikā, tāruṇyapi-

ḍakāḥ,²⁰¹ and valmīka. Chapter twenty-seven is about viṣa, cūrṇadāha, agnidāha, and madātyaya. Chapter twenty-eight deals with grahas, unmāda and apasmāra, twenty-nine with rasāyana and vājīkaraṇa, thirty with yoniroga, garbhāśūla, garbhapāta, sūtikāroga, stanyadoṣa, and bālaroga.

Three additional chapters follow, concerned with bheṣajakalpa, viṣapratyaūśadha and kriyākalpa. The chapter on bheṣajakalpa, i.e., the preparation of medicines, treats of general subjects related to the collection of drugs, gives a list of substitutes for drugs which cannot easily be procured, deals with weights and measures, the various medicinal preparations and the proportions of their ingredients, etc. It is the only chapter in which a series of authorities is mentioned by name: Ātreya (122), Aurabhra (81), Bhoja (122, 160–169), Caraka (93, 170), Kharanāda (102), Ravigupta (184cd–185ab), Śālihotra (83–85ab), Suśruta (101, 182–184ab), and Vāluḥ (159).²⁰² The chapter on viṣapratyaūśadha deals with antidotes, or rather drugs which counteract noxious effects of a rather long series of medicinal substances. The chapter on kriyākalpa, the only one in which prose occurs, is about pañcīṣṭha.

The first pañcīṣṭha chapter, on pratyaūśadhas, enumerates more drugs which counteract noxious effects of other medicines; the second, on bheṣajakalpa, gives additional rules on the preparation of medicines; the third, on kriyākalpa, contains additional information on the types of preparation called gaṇḍūṣa, kavala and mūrdhataila; the fourth consists of a long series of kaṣāyas to be used in various disorders, and in addition it presents a number of gaṇas.²⁰³

Apart from the authorities mentioned in the bheṣajakalpa chapter and the reference to Caraka in the first verse, Dāmodara only specifies his source in the kriyākalpa chapter, where two prose passages are said to be taken from the (*Aṣṭāṅga*)saṃgraha.²⁰⁴ More passages from this chapter were borrowed from the works ascribed to Vāgbhaṭa, though Dāmodara omitted to mention this.

Vāgbhaṭa is Dāmodara's main source according to S. Viswanatha Sarma.²⁰⁵ Nevertheless, he does not follow this authority in the arrangement of the diseases. Some of the material included in his treatise has been influenced by Vāgbhaṭa without leading to literal borrowing; this is, for instance, clearly visible in the groups (varga) of medicinal substances of chapter three. The gaṇas of the kaṣāyapañcīṣṭha chapter, on the other hand, are identical with those of the *Aṣṭāṅgahrdayasaṃhitā*.²⁰⁶

The *Ārogyacintāmaṇi* is quoted in the *Vīrasimhāvaloka*²⁰⁷ and in Ṭoḍara's *Āyurvedasaukhyā*.²⁰⁸

Special features

The chapter on prognostics (7) contains two verses on pulse examination.

Noteworthy are the following features of Dāmodara's nosology: the therapy of a raktapittajvara is described, not known from earlier texts, the symptoms of which are omitted (8.28–30); the only specific type of saṃnipāta fever described is abhinyāsa (8.44–50); asṛgdara is dealt with in the chapter on raktapitta (12.18–22); mūtrāghāta is absent from the chapter on urinary disorders (13); saṃnyāsa is absent from the chapter on chardi, tṛṣṇā and mūrchā (17); ślīpada is dealt with in the group of chapters on kāyacikitsā (24); the therapy of palita, indralupta and dāruṇa is described at the end

of the śālākya chapter (25);²⁰⁹ bhagna and śūkadoṣa are absent from the śālya chapter (26), which includes masūrīkā and visphoṭa; the therapy of only three kṣudrarogas, jālagardabha, tāruṇyapīḍakāḥ and valmīka, is described in the same chapter, and lū-tāvraṇa²¹⁰ has been added; a new type of dāha, namely cūrṇadāha, is mentioned in the chapter on viṣa (27), along with agnidāha, while madātyaya is also relegated to this chapter; mūḍhagarbha and yonikanda are absent from the chapter on women's and children's diseases (30); some more diseases are not mentioned, such as vṛddhi²¹¹ and visarpa.²¹² The presence of disorders like āmavāta, the several types of śūla, sthauḷya (= medoroga), śītapitta, amlapitta, visphoṭa and masūrīkā betray the influence of the *Mādhavanidāna*, but some diseases added after Mādhava's time, such as vardhma, snā-yukaroga and somaroga, are absent. On the other hand it is remarkable that asthistrāva is mentioned at the very end of the work (kaṣāyapariśiṣṭa 478–480).²¹³

A conspicuous feature of Dāmodara's therapeutics is the absence of rasauśadhas and the emphasis on medicinal substances of vegetable origin. Noteworthy in this context is the description of the killing (māraṇa) of maṇḍūra at the end of chapter three. The materia medica consists for the greater part of substances known from the classical saṃhitās. Some later elements are ākulī,²¹⁴ babbūlaka,²¹⁵ dhattūra,²¹⁶ khārī,²¹⁷ and maheṛaṇā.²¹⁸ Opium seems to be absent.

Religious therapy has been relegated to the background and has only a very minor role in possession by grahas and bālagrahas; remarkably enough, it is not even prescribed in masūrīkā.

Dāmodara's work appears to be one of the first that extensively and minutely describe, in the bheṣajakalpa chapter, many rules pertaining to the preparation of compound medicines, especially with regard to the quantities of their ingredients and the ratios of these. A detailed discussion of this subject is not found in the earlier treatises themselves but only in their commentaries.

The lists of pratyaśadhas form an unusual feature of the work.

The author

Dāmodara is said to be the son of Viṣṇubhaṭṭa in the colophons of the *Ārogyacintāmaṇi*. His father, Viṣṇu, originated from Vidarbha according to one of the MSS.²¹⁹ The text itself gives no particulars about the author and does not even mention his name.²²⁰

Date

Though it has been claimed that nothing is known about the author's time,²²¹ it is nevertheless possible to establish his chronology by taking into account that he must have lived in the same age or somewhat later than the author of the *Śārṅgadharaśaṃhitā*, because the examination of the pulse is mentioned by Dāmodara. Since Dāmodara, on the other hand, must be earlier than Vīrasimha who quotes him, he can be dated to the first half of the fourteenth century.²²² This is also the date proposed by P. Hymavathi, who arrived at his conclusion on quite different grounds.²²³

Several medical authors bearing the name of Dāmodara are known. Unspecified authors of this name are quoted or referred to in Ananta's *Pratāpakaḥpadrūpa*, Haṃsārāja's *Bhīṣakcakracittotsava*, Rāmeśvara Bhaṭṭa's *Rasarājalakṣmī*,²²⁴ Revaṇasiddha's

Virabhaṭṭīya, Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*,²²⁵ Viṣṇudeva's *Rasarāja-lakṣmī*, Viṭṭhala's *Rasasindhu*,²²⁶ and in two anonymous treatises, the *Cikitsāsārasaṃgraha*²²⁷ and the *Ratnākaraśadhayogagrantha*.²²⁸

A Dāmodara is mentioned as one of the promoters of āyurveda in the *Vaidyaśāstrapravartakācāryānāmasamuccaya*.

The *Dhanvantarīyanighaṇṭu*

The *Dhanvantarīyanighaṇṭu*²²⁹ is a comprehensive lexicon of materia medica which lists both the names and the properties of medicinal substances.

Contents

The treatise consists of two parts: a Gaṇadavyāvali (69 verses),²³⁰ preceded by an introduction (19 verses), and the Nighaṇṭu in its proper sense (about 1,550 verses).²³¹

The introductory verses open with a salutation to Dhanvantari; the author states thereupon that he is going to deal with the Sanskrit and Prakrit names of those among the endless number of vegetable and other substances which are useful in medicine. He hints at the compilatory character of his work by referring to the nighaṇṭus he consulted before composing his own treatise.²³²

The Gaṇadavyāvali divides the medicinal substances into seven large groups (varga), subdivided into smaller units (gaṇa). The substances belonging to each of these gaṇas are enumerated, together with their actions and modes of employment.²³³ The names occurring in the lists of the Gaṇadavyāvali are mostly those of the first member of a series of synonyms of the Nighaṇṭu or consist of a commonly employed synonym. Exceptions to this rule are, for example, the two plants called puṇya (1.4)²³⁴ and suparṇī (1.5),²³⁵ sudhā (1.9),²³⁶ and gr̥hjana (4.4).²³⁷ The total number of items of the Gaṇadavyāvali is said to be 373 (7.3), but the actual number of drugs described in the Nighaṇṭu is much larger.

One of the principles governing the composition of the *Dhanvantarīyanighaṇṭu* is to regard particular drugs, listed in the Gaṇadavyāvali, as representatives of a group of substances and to describe the members of such a group separately in the Nighaṇṭu,²³⁸ either as a viśeṣa²³⁹ or in a different way.²⁴⁰ A related type of summarizing occurs especially in the lists of the sixth varga of the Gaṇadavyāvali: taila (6.7) refers to many kinds of oil, payas (6.7) to both milk and dadhi, etc. At the end of the sixth varga the Gaṇadavyāvali is said to have been expounded by Dhanvantari,²⁴¹ a statement that one expects to occur at the end of the seventh varga. This may imply that the seventh varga is a later addition,²⁴² the more so since the Gaṇadavyāvali omits to mention a large part of its contents.

The Nighaṇṭu, which deals with the synonyms of each drug and its properties and actions, follows the Gaṇadavyāvali in arranging the medicinal substances into seven large groups:²⁴³ (1) guḍīcyādivarga, drugs which eliminate one or more of the doṣas; (2) śatapuspādivarga, mainly consisting of spices; (3) candanādivarga, consisting of fragrant substances; (4) karavīrādivarga, containing various plants; (5) āmrādivarga, fruit-bearing trees; (6) suvarṇādivarga, describing metals, minerals,

(semi)precious stones, and articles of diet; (7) *miśrakādivarga*, describing groups of drugs and poisonous substances.

As already said before, the number of drugs dealt with in the *Nighaṇṭu* is considerably larger than that mentioned in the *Gaṇadavyāvali*, because it distinguishes many varieties. This procedure is carried very far in some instances: *vijayā* (1.130–131)²⁴⁴ is regarded as a variety of *medā*, *khaṣṭila* (6.120)²⁴⁵ as a kind of grain. In rare cases it happens that the *Nighaṇṭu* describes a plant which is absent from the *Gaṇadavyāvali* and not considered to be a variety of some other plant listed in the latter.²⁴⁶ The *Dhanvantārīyanighaṇṭu* ends with lists of *ekārthas* and *anekārthas*,²⁴⁷ called *Uttaranighaṇṭu*.²⁴⁸

The compilatory character of the work is confirmed by the presence of quotations.²⁴⁹ Sources are not mentioned by name, *Nāgārjuna* excepted,²⁵⁰ but the author may have been acquainted with the *Aṣṭāṅganighaṇṭu*, since verses from that work form part of the *Dhanvantārīyanighaṇṭu*.²⁵¹ The *Rasaratnasamuccaya* or some of its sources may also have been consulted.²⁵²

The *Dhanvantārīyanighaṇṭu* is a work that gained much prestige.²⁵³ A later treatise that was heavily influenced by it is the *Soḍhalanighaṇṭu*, which repeats a large part of the *Gaṇadavyāvali*²⁵⁴ and many verses from the *Nighaṇṭu*.²⁵⁵

Authors and works quoting from or referring to the *Dhanvantārīyanighaṇṭu*²⁵⁶ are: *Aruṇadatta*,²⁵⁷ the commentary on the *Āyurvedābhīṣā*,²⁵⁸ *Bhaṭṭoji Dikṣita* in his *Tithinirṇayapradīpa*,²⁵⁹ *Bhāvamīśra* in some glosses on his *Bhāvaprakāśa*, *Candranandana*,²⁶⁰ *Cūḍāmaṇimīśra* in his *Rasakāmadhenu*, *Haridattaśāstrin* in his commentary on the *Rasatarāṅgiṇī*, *Hemacandra* in his auto-commentary on the *Abhidhānacintāmaṇi*,²⁶¹ *Hemādri*,²⁶² *Indu* in his commentary on the *Aṣṭāṅgasamgraha*,²⁶³ *Jñānavimalagaṇi* in his commentary on *Maheśvara's Śabdabhedapradakāśa*,²⁶⁴ *Kṛṣṇadatta* in his commentary on *Trimalla's Śaṭaśloki*, *Kṣīrasvamin* in his commentary on the *Amarakośa*,²⁶⁵ *Mahendra Sūri* in his commentary on *Hemacandra's Anekārthasamgraha*,²⁶⁶ *Mallinātha*²⁶⁷ in his commentary on the *Amarakośa*,²⁶⁸ *Maṅkha* in his *Anekārthakośa*,²⁶⁹ *Raghuṇātha* in his *Bhojanakutūhala*, the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Brhannighaṇṭuratnākara*, *Priyavrat Śarmā* in the auto-commentary on the *Dravyaguṇasūtra*, *Śivadāsa* in his commentary on the *Uttarasthāna* of the *Aṣṭāṅgharidayasamhitā*,²⁷⁰ *Śrīdāsa* in his commentary on the *Uttarasthāna* of the *Aṣṭāṅgharidayasamhitā*,²⁷¹ *Śrīvallabhagaṇi* in his commentary on *Hemacandra's Nighaṇṭuśeṣa*,²⁷² the *Tāmbūlamāṇjarī*, *Vardhamāna* in his *Gaṇaratnamahodadhī*,²⁷³ and *Yādavjī Trikamjī* in his *Rasāmṛta*.

The *Dhanvantārīyanighaṇṭu* was one of the sources of *Mahendra Sūri's* commentary on *Hemacandra's Anekārthasamgraha*,²⁷⁴ *Maṅkha's Anekārthakośa*,²⁷⁵ and *Raghuṇāthajī's Nighaṇṭusamgraha*.

Special features

The *Dhanvantārīyanighaṇṭu* is an important work with many noteworthy features.

Some interesting medicinal substances and other details are: *kandodbhavā guḍūci* (1.8);²⁷⁶ the distinction between *mūrvā* and *morāṭa* (1.13–16);²⁷⁷ *dhanvayāsa* and *yāsa* (1.20–23); *nepāla* as a distinct type of *kirātatikta* (1.35);²⁷⁸ *jalamusta* (1.43–44);²⁷⁹ the description of *paṭola* and *paṭoli* as two separate plants (1.49–53);²⁸⁰ *gandhapalāśa* as a variety of *śaṭī* (1.64–66);²⁸¹ *śvāsāri* (1.72)²⁸² as a variety of *pāthā*;

kapaṭa (1.82–83)²⁸³ as a variety of *kattṛṇa*; the description of two kinds of *śāli*- and *prṣṭiparnī* (1.87–92); the description of *lakṣmaṇī* (1.97)²⁸⁴ as a white-flowered type of *kaṇṭakārī*; *kāśaghnī* (1.98–101)²⁸⁵ as a variety of *brhātī*; *śyonāka* and *aralu* (1.114–116)²⁸⁶ as names of one and the same tree; *vijayā* (1.130–131)²⁸⁷ as a type of *medā*; two types of *klītanaka* (1.144–145)²⁸⁸ as varieties of *madhuyasṭī*; *dadhīpuṣṭī* (1.153–154)²⁸⁹ as a type of *kapikacchū*; *ḍaṅgarī* (1.181–182)²⁹⁰ as a variety of *trapusa*; the distinction between *āragvadha* (1.219–220) and *kaṇṭhikāra* (1.221–222);²⁹¹ *araṇī* (1.225–226)²⁹² and *jayapāla* (1.227–228)²⁹³ as varieties of *dantī*; *kāñcanakṣīrī* (1.240–241)²⁹⁴ and *svaṇnakṣīrī* (1.242–243)²⁹⁵ as two distinct types of *kṣīriṇī*; *śvetapuṣṭī* (1.252–253),²⁹⁶ also called *mṛgākṣī*,²⁹⁷ as a variety of *viśālā*; five types of *balā* are described: *balā*, *mahābalā*, *nāgabalā*, *atibalā* and *rājabalā*,²⁹⁸ *vṛṣamedhā*,²⁹⁹ *śvetavacā* (2.10–11)³⁰⁰ as a variety of *vacā*; *nāḍhiṅgu* (2.40–41);³⁰¹ the description of substitutes for *vamśarocanā* (2.55–56) and a variety of this substance called *tvakkṣīrī* or *tugākṣīrī* (2.57–59);³⁰² the description of three plants called *yavānī* (2.91–94);³⁰³ the description of five kinds of *candana*: *candana*, *raktacandana*, *kucandana*,³⁰⁴ *kāliyaka*, and *barbarika* (3.1–9); *kāleyaka* (3.27)³⁰⁵ as a variety of *agaru*; *gandhamāṃsī* (3.47–48)³⁰⁶ as a distinct variety of *māṃsī*; *dama* (3.66)³⁰⁷ as a variety of *damana*; *girisindūra* (3.103–104) as a variety of *sindūra*; *uccatā* (4.29–30)³⁰⁹ as a variety of *guṇjā*; *cāṇākyamūlaka* (4.35–36) as a variety of *mūlaka*; *janṭukārī* (4.88–89);³¹¹ *māṃsarohiṇī* (4.94–96);³¹² *kuśa* is regarded as a variety of *darbha* and is called *mṛdudarbha* (4.133–134); *mahānala* (4.142–143)³¹³ as a variety of *nala*; three types of *dūrvā* are described: *nīla*,³¹⁴ *śveta*-, and *gaṇḍadūrvā* (4.143–148); *balāmoṭā*,³¹⁵ *madhukarkaṭī* (5.31–32);³¹⁶ *jalamadhūka* (5.48–50);³¹⁷ *māḍa* (5.70–71)³¹⁸ as a kind of *tāla*; the description of four types of *karaṇja*:³¹⁹ *karaṇja*, *prakīrya*, *udakīrya*, and *aṅgāravallikā* (5.107–111), two types of *śiṃśapā*: *śiṃśapā* and *kuśiṃśapā* (5.121–123), and two types of *ketakī*: *ketakī* and *suvarṇaketakī*; *sāga*,³²¹ *jūrṇā* as a kind of grain (6.108);³²² *methikā* (6.111–112)³²³ and *vanamethikā* (6.113);³²⁴ the description of *khaṣṭila*³²⁵ and *opium* (6.120–121); *marjikā* as a synonym of *śikhariṇī* (6.301); the description of groups of drugs like *svādu*- (7.3–4) and *sugandhitriphalā* (7.5), three kinds of *cāturbhadra* (7.7–12), *pañcabhṛṅga* (7.17), and *yakṣakardama*³²⁶ (7.45–46).³²⁷

Noteworthy features of the sections on inorganic substances are: the names of the three types of *muṇḍa*(loha): *mṛdu*, *kaṇṭha*, *kaḍāra*, six types of *tīkṣṇa*(loha): *kharasāra*, *hartāla*, *tāla*, *valla*, *vajjara*, *kālaloha*, and five types of *kānta*(loha): *bhrāmara*, *cumbaka*, *rañjaka*, *ālocaka*, *romaka* (6.26–29); the eight *mahārasas* enumerated are: *abhra*, *vaikrānta*, *māksika*, *vimala*, *adrija*, *sasyaka*, *capala*, *rasaka* (6, *rasāḥ* 1);³²⁸ a series of seven *dhātus* (metals): gold, silver, copper, tin, zinc, lead and iron (7.87), and another series of nine *dhātus*: gold, silver, copper, tin, lead, *tīkṣṇa*, *kāṃsya*, *pittala*, *kiṭṭaloha* (7.95); a series of seven *upadhātus*: *svaṇnamāksika*, *tāramāksika*, *tuttha*, *kāṃsya*, *rīti* (= *pittala*), *sindūra*, *śilājatu* (7.88); two series of *uparasas*: (a) *gandha*, *hiṅgula*, *abhra*, *tālaka*, *śilā*, *sroto'ñjana*, *ṭaṅkaṇa*, *rājāvartaka*, *cumbaka*, *sphaṭikā*, *śaṅkha*, *khaṭī*, *gairika*, *kāsisa*, *rasaka*, *kaparda*, *sikatā*, *bola*, *kaṅkuṣṭhaka*, *saurāṣṭṛī*, (b) *gandhāśman*, *gaira*, *kāsisa*, *kāṅkṣī*, *tāla*, *śilā*, *añjana*, *kaṅkuṣṭha* (7.92–93); a series of eight *sādhāraṇarasas*: *kampilla*, *capala*, *gauripāṣaṇa*, *navasāgara*, *kaparda*, *vahnijāra*,

girisindūra, hiṅgula, bodāśṛṅga (7.94–95).³²⁹

The author

The *Dhanvantarīyanighaṇṭu* does not mention its author. As referred to before, a verse at the end of the *suvarṇādivarga* of the *Gaṇādravyāvali* states that it emanated from the mouth of Dhanvantārī. It is probably for this reason that the treatise became known as *Dhanvantarīyanighaṇṭu*, and that the verses from it are quoted as spoken by Dhanvantārī. Some MSS ascribe the work to Mahendrabhogika, resident of Sthāṇvīśvara³³⁰ and son of Kṛṣṇabhogika.³³¹

Date

One of the problems connected with the date of the *Dhanvantarīyanighaṇṭu* is whether the treatise as it is known to us represents a revised and enlarged version of an earlier text, called *Dravyāvali*,³³² that contained the *Gaṇādravyāvali* and the series of synonyms of the *Nighaṇṭu* only, and that has gradually developed into the *Dhanvantarīyanighaṇṭu* as it is now.³³³ It has also been suggested that this process of growth continued for a long time, resulting in the incorporation of drugs that became current in later periods.³³⁴

Various arguments have been put forward in support of this thesis. One of these is that, at the end of the *Gaṇādravyāvali*, the author states that, the *Gaṇādravyāvali* being completed now, he is going to enumerate the synonyms in due order. Instead of doing so, a renewed salutation to Dhanvantārī follows, accompanied by an introductory verse mentioning the author's intention to describe the qualities and actions of the medicinal substances. It is remarkable indeed that the author, in his introductory verses, refers to his work as the *Dravyāvali*, which is said to consist of a *Gaṇādravyāvali* and a series of synonyms, while allusions to the medicinal properties also occur in the introduction; their description is even an essential element of the *Gaṇādravyāvali*. The argument is therefore not convincing, but it remains to be explained why the series of synonyms from the *Dhanvantarīyanighaṇṭu* are quoted by later authors, whereas the verses about the properties of the drugs seem to have been less appreciated or less well known.³³⁵ The problem whether an earlier *Dravyāvali*, of a structure similar to that of the *Aṣṭāṅganighaṇṭu*, has existed or not, depends in my opinion on a thorough study of all the manuscripts available.

Important too are the quotations from a *Dravyāvali*. Authors and works citing from it are: Āḍhamalla, Anantakumāra,³³⁶ the *Bhesajjamañjūsāsanaya*, Candratā's *Yogarātnasamuccaya*, Mallinātha's commentary on the *Amarakoṣa*,³³⁷ Niścalakara's *Ratnaprabhā*,³³⁸ Śivādāsasena's commentary on the *Cakradatta*,³³⁹ and Śrīkaṇṭhadatta's *Kusumāvali*.³⁴⁰

An argument in favour of the thesis that the *Dhanvantarīyanighaṇṭu* was subject to a process of gradual growth, resulting in accretions of a later date, is based on Kṣīrasvāmin's acquaintance with it. It has been suggested that an earlier version must have existed, since the treatise in its present shape, describing, for example, opium and zinc, cannot possibly date from the first half of the twelfth century,³⁴¹ the period in which Kṣīrasvāmin lived.³⁴² The structure of the *Dhanvantarīyanighaṇṭu*, especially its deal-

ing with many drugs as varieties of some basic substance, facilitated undoubtedly the inclusion of later additions.³⁴³

The date of the *Dhanvantarīyanighaṇṭu*, at least its terminus ante quem, can be determined from quotations in later works. Kṣīrasvāmin's commentary on the *Amarakoṣa*, which contains numerous quotations from it, testifies to its existence in the first half of the twelfth century. It may therefore have been composed in the period between A.D. 1000 and 1100,³⁴⁴ not earlier, because the *Aṣṭāṅganighaṇṭu*, which presents a less advanced stage of composition of a *nighaṇṭu*, can be assigned to the period 800–1000. The reference to the *Dhanvantarīyanighaṇṭu* as one of his sources by Maṅkha (first half of the twelfth century)³⁴⁵ in his *Anekārthakoṣa* and the quotations in Vardhamāna's *Gaṇaratnamahodadhi* (composed in 1140),³⁴⁶ Hemacandra's auto-commentary on his *Abhidhānacintāmaṇi* (twelfth century) and Aruṇadatta's commentary on the *Aṣṭāṅgahṛdayasamhitā* (earlier than 1200) confirm this dating. Some remarks in Kṣīrasvāmin's commentary³⁴⁷ seem to imply that he considered Amarasimha to have been acquainted with the *Dhanvantarīyanighaṇṭu* or an earlier version of it, but this is unacceptable and not supported by internal evidence.³⁴⁸

The descriptions of Cannabis, opium and zinc in the *Dhanvantarīyanighaṇṭu* do not invalidate the date suggested above, since these substances are also mentioned by Vaṅgasena (eleventh century).

Durgadeva

Durgadeva³⁴⁹ was the author of the *Riṣṭhasamuccaya* (= *Riṣṭhasamuccaya*),³⁵⁰ a treatise in 261 Śaurasenī Prakrit verses on signs foreboding death (ariṣṭa or riṣṭa). This primarily jyotiṣa work is also of medical interest.³⁵¹

The riṣṭas are divided into three main groups: piṇḍattha (Sanskrit: piṇḍastha), payattha (Sanskrit: padastha) and rūvattha (Sanskrit: rūpastha) (17). Verses 18–40 discuss the piṇḍattha group, verses 41–67 the payattha group. The rūpastha group is subdivided into niyachāyā (Sanskrit: nijacchāyā; 69–84), parachāyā (Sanskrit: paracchāyā; 85–94) and chāyāpurisa (Sanskrit: chāyāpuruṣa; 95–106). The prognostic significance of dreams, divided into devadakahiya (Sanskrit: devatākathita) and sahaja, is also dealt with (107–129). Other groups of riṣṭa are: paccakkha (Sanskrit: pratyakṣa; 130–134), liṅga (135–147), paṇha (Sanskrit: praśna; 148–242).

The *Riṣṭhasamuccaya* was completed at the Śāntināthabhavana in Kumbhanagara in July 1032, during the reign of one Lakṣmīnivāsa. The work was written at the instance of Durgadeva's teacher, and is based on earlier works, e.g., the *Marāṇakapḍikā*.³⁵²

Durgadeva³⁵³ was a Digambara Jain, the pupil of Saṃjamadeva (Sanskrit: Saṃyamadeva), the pupil of Saṃjamasena (Sanskrit: Saṃyamasena), the pupil of Māhavacanda (Sanskrit: Mādhavacandra).³⁵⁴ He was a resident of Kumbhanagara.³⁵⁵

Ekāmrānātha

Ekāmrānātha was the author of the *Āyurvedasudhānidhi*,³⁵⁶ sometimes ascribed to Sāyaṇa,³⁵⁷ but actually written at the request of the latter,³⁵⁸ which means that it dates

from the fourteenth century. The work is referred to in Sāyaṇa's *Alaṃkārasudhā-nidhi*.³⁵⁹

Ekāmrānātha, of Kāśyapagotra, is described as the father of Kāmeśanātha and the maternal grandfather of Śrīśailanātha, who wrote the *Prasānottaramālā*.³⁶⁰

Gaṅgādhara

Gaṅgādhara was the author of the *Gandhasāra*,³⁶¹ a treatise on cosmetics and perfumery, compiled from various sources.³⁶² This work may be the only comprehensive treatise on the subject that has been preserved. The art of cosmetics and perfumery, called gandhayukti or gandhaśāstra,³⁶³ has connections with the medical science.³⁶⁴

Contents³⁶⁵

The work is arranged in three chapters (prakaraṇa), consisting of verses composed in various metres. Each chapter begins with a maṅgala addressed to Śiva. The maṅgala of chapter one also praises Gaṇeśa, Sarasvatī, and a tutelary deity called Gandhayakṣa.³⁶⁶

The contents suggest that the *Gandhasāra* was intended for use at royal courts.³⁶⁷

Chapter one (paribhāṣāprakaraṇa; ninety-one verses) deals with techniques and technical rules; subjects covered are: the six basic techniques (ṣaṭkarman) employed in gandhaśāstra (6); the description of these techniques (bhāvana, 1.7; pācana, 1.8–2.20; bodha, 2.21–22; vedha, 2.23–25; dhūpana, 2.26–29; vāsana, 2.30), accompanied by various rules about vāsana and mixtures of fragrant substances (2.31–7.81); substitutes for particular ingredients (7.82–8.85); remarks about the effect of perfumes on one's health, constitution, etc. (8.86–91).

Chapter two (gandhodakādīnānāgandhopayogiprakaraṇa; 392 verses) is concerned with gandhodaka (perfumed water; 12+6 verses); mukhavāsa (perfumes used to scent the mouth and the breath; 24 verses); pārijāta (special types of mukhavāsa, e.g., scented areca nuts, called pūgakaṇa; fragrant oils; 20+32 verses); udvartana (unguents and oils used for massage; 25 verses);³⁶⁸ snāna (scented water for bathing; 24 verses); jalavāsa (scented drinking water; 3+11 verses), followed by verses on fragrant unguents and paṭavāsa (perfumed powders for scenting clothes; 17 verses); mrgarāja (the preparation of artificial musk; 2+10 verses); dhūpa (incenses; 64 verses); varti (incense sticks; 15 verses); dipavarti (perfumed wicks for lamps; 12 verses); uddhūlana (scented powders; 7+8 verses); niryāsa (artificial resins; 7 verses); syanda (exudations; 11 verses); kusumādidruti (the extraction of oils, etc., from flowers, such as jāṭī, mallī, ketakī; 22 verses); gandhasaṃkramaṇa (the transmission of perfumes; 2 verses); kṛtrimadravyaṇi (the preparation of artificial perfumes, some of which with smells similar to those of natural products: artificial camphor, jāvādi, saffron, musk, guru, aguru, kuṣṭha; combinations and their numbers; 63 verses); dravyamelanaprakāra (mixtures of aromatic substances; 5 verses).

Chapter three (dravyanighaṇṭus tatparīkṣā ca; 120 verses) consists of a nighaṇṭu, which gives, after four introductory verses, the names of aromatic substances with their synonyms.³⁶⁹ The substances dealt with are divided into a number of groups: leaves (pattravarga; 42.5–12); flowers (puṣpavarga; 42.12–44.28); fruits (phalavarga; 44.28–

45.40); woody substances and rinds (kāṣṭhavarga; 45.41–46.56); roots (mūlavarga; 46.57–47.73); resinous substances (niryāsavarga; 47.74–48.82); substances derived from animals (jīvavarga; 48.83–49.91). The second part of the chapter is concerned with descriptions of substances and checks on their genuineness. The treatise ends with three concluding verses.

The only source quoted is a work called *Yogaraṅgālaya*.³⁷⁰ The editor of the *Gandhasāra*, R.T. Vyas, remarks that one verse (19.10 on snāna) forms also part of Varāhamihira's *Bṛhatsaṃhitā* (76.5),³⁷¹ and that four verses on snāna (20.21–24) are related to verses found in the same treatise (76.2–4). A number of other passages of the *Gandhasāra* may have been influenced by Varāhamihira's chapter on gandhayukti,³⁷² or by the chapters on perfumes of the *Agni-* and *Viṣṇudharmottarapurāṇa*.³⁷³

Special features

Six basic techniques of gandhaśāstra are distinguished and described: bhāvana: soaking the triturated ingredients in scented water and purifying the mixture five or six times; pācana: heating of the purified materials; bodha: reviving the scent by means of particular substances (bodhakadravya); vedha: penetration, effected by means of specific substances (candrika) or bodhakadravyas; dhūpana: fumigation; vāsana: transmission of the scent of particular flowers.³⁷⁴ Several varieties of pācana or pāka are described: puṭapāka, gartapāka, veṇupāka, dolāpāka, kharparapāka, haṃsapāka, kālapāka, etc.³⁷⁵

The aromatic substances are, for the purpose of combining them, divided into three classes: mitra (friendly), udāsīna (neutral), and śatru (hostile); equal quantities can be taken when the substances are mitra, half the quantity of an udāsīna substance, and a quarter of a śatru substance (6.62 and 70). Five types of gandhājala are distinguished: kalkāmbu, svarasa, kvātha, āsava, and kusumadruti (9.10–10.6). The author sometimes gives his own opinion on a disputed subject, after quoting various opinions (11.8–9). Many fragrant compounds have fanciful names. Names of pārijāta's are: vidagdha-dayita (12.8), madhukarasamptoṣa (13.9), tripuraharadāsavallabha (13.12). Names of dhūpas are: madanapatākā (25.10), dakṣiṇapavana (25.11), candrāmōda (25.12), ugrasāraśīta (25.13), nārāca (25.18), tribhuvanasāra (27.33), kolāhala (27.41), citramṛgākṣa (28.54), etc. Names of vartis are: vasantatilaka (30.73) and māṇavakā (30.75). Some of the dhūpas are not only fragrant, but have special effects, such as: causing confusion (janamohana; 28.49), protecting pregnant women and young children (29.58), preventing possession by bhūtas and dākinīs (29.59), curing all kinds of fevers (29.60), and protection against noxious or poisonous insects, and wild animals (29.61–63).

A characteristic feature of the *Gandhasāra* is the frequent use of names for vegetable and other substances that are not common in āyurvedic treatises. Notable too is a preference for short or abbreviated names, such as nāga and its synonyms for nāgakesara, madhu for madhuyasti. Unusual substances and those introduced at a later date are also rather frequent.³⁷⁶

Noteworthy names³⁷⁷ are: ajā (37.22),³⁷⁸ amara (31.5),³⁷⁹ aruṇī (46.54),³⁸⁰ astra (3.23; 26.25),³⁸¹ bandhumūla (23.17),³⁸² barbara (7.71; 27.37; 48.77),³⁸³ barbaraka (15.25),³⁸⁴ bhramara (9.4 and 10; 18.4; 28.47; 32.1),³⁸⁵ bhūta (19.14; 21.6; 31.5),³⁸⁶

cala (3.23; 26.25 and 28; 40.56),³⁸⁷ caṇḍalavaṅga (30.73),³⁸⁸ carmapattī (42.7),³⁸⁹ caula (17.16),³⁹⁰ chāga (5.51; 7.76),³⁹¹ dānava (9.1 and 5; 34.8),³⁹² danuja (9.4 and 8; 19.13),³⁹³ dhārāputī (17.16),³⁹⁴ dhūṇaka (30.76),³⁹⁵ dīna (47.68),³⁹⁶ dīti (31.5),³⁹⁷ ekāṅgī (47.70),³⁹⁸ ghūṇaka (31.12),³⁹⁹ gomayākyavṛkṣa (37.25),⁴⁰⁰ guru (5.56; 16.4; 23.1; 37.21),⁴⁰¹ harita (9.3),⁴⁰² hātaka (16.26),⁴⁰³ jīṅgikā (23.17; 36.11),⁴⁰⁴ jūhī (44.28),⁴⁰⁵ kākātunḍa (7.50 and 74),⁴⁰⁶ kāntā (9.8; 19.15; 21.2; 25.18; 26.20; 28.47; 30.41; 31.1),⁴⁰⁷ kāntālaka (36.14; 44.26),⁴⁰⁸ kapi (18.18),⁴⁰⁹ karkāṭa (5.50; 38.38; 40.52; 51.117),⁴¹⁰ kāthina (16.4; 19.13 and 14),⁴¹¹ kauntī (7.79; 8.84; 19.16),⁴¹² kavukā (22.6),⁴¹³ khadrā (8.85 and 86),⁴¹⁴ kīreṣṭa (11.11; 36.11),⁴¹⁵ kokāhva (45.50),⁴¹⁶ kolakarnī (48.86),⁴¹⁷ korāṅgī (11.15),⁴¹⁸ kośa (15.20),⁴¹⁹ kukūṛaka (7.71),⁴²⁰ kuṭṭāla (15.25),⁴²¹ kuntī (16.28),⁴²² lakṣmī (38.37),⁴²³ lālā (38.39),⁴²⁴ lava (13.9 and 10; 21.1),⁴²⁵ lāva (12.6; 22.8; 23.1; 43.13),⁴²⁶ lavalī (4.34; 31.5),⁴²⁷ mada (3.25; 8.83; 9.12; 25.10; 33.8),⁴²⁸ mṛgamada (31.7; 37.20 and 21),⁴²⁹ mṛganābhi (36.8),⁴³⁰ nābhi (12.24; 34.9; 40.60),⁴³¹ nārī (25.17),⁴³² naṭī (16.28),⁴³³ nṛpavaktrāhva (47.68),⁴³⁴ pamarā (38.36; 50.110),⁴³⁵ paraśucchinna (35.16 and 17),⁴³⁶ pati (3.22; 12.21),⁴³⁷ piśuna (34.9),⁴³⁸ pīvara (38.33),⁴³⁹ priyā (7.82),⁴⁴⁰ rāma (6.66),⁴⁴¹ raṇa (33.2; 40.52),⁴⁴² rātipuṣpī (43.21),⁴⁴³ ravi (23.1; 24.3; 26.19; 27.32; 33.1),⁴⁴⁴ sakhi (47.67),⁴⁴⁵ saktu (29.61),⁴⁴⁶ śālija (9.12; 24.9; 31.4; 34.8; 36.13; 37.22; 48.84),⁴⁴⁷ śekhara (6.66; 38.36),⁴⁴⁸ śītalikā (38.33),⁴⁴⁹ śrgāla (16.5),⁴⁵⁰ strīpuṣpa (34.9),⁴⁵¹ sugandhibarbarī (7.74),⁴⁵² śuka (3.24; 12.21; 13.13; 19.12 and 16; 22.11; 23.1; 24.3 and 9; 27.33),⁴⁵³ śukra (18.18),⁴⁵⁴ śukrāhvā (7.75),⁴⁵⁵ suvarcā (43.18),⁴⁵⁶ suvarṇatālī (6.66),⁴⁵⁷ svarṇatālīkā (42.5),⁴⁵⁸ tanaya (38.38),⁴⁵⁹ taṅkaṇa (35.15),⁴⁶⁰ tuhiṇī (23.16),⁴⁶¹ turāṅgavadanā (46.54),⁴⁶² turuṣka (22.6; 24.5; 25.7; 40.59),⁴⁶³ vānīra (31.1; 46.57),⁴⁶⁴ vanitā (26.21),⁴⁶⁵ varṇikā (43.18),⁴⁶⁶ veśākyā (16.28),⁴⁶⁷ veśyā (17.16),⁴⁶⁸ viḥāṇī (30.74; 45.39),⁴⁶⁹ vṛndā (9.7 and 10; 33.7),⁴⁷⁰ yāminī (12.21),⁴⁷¹ yati (38.36),⁴⁷² yavana (26.24 and 29),⁴⁷³ yuvati (3.22).⁴⁷⁴

The author

The author mentions his name, Gaṅgādhara, at the end of the work; the same name is found in the colophons. No particulars about him are known.

Date

The *Gandhasāra* is earlier than the *Gandhavāda*, which quotes some verses from it. The terminus post quem can only be deduced from the terminology employed, the substances mentioned as ingredients, and the possible sources of the work. R.T. Vyas, the editor of the text, places it in the eleventh or twelfth century, his main argument being that the *Gandhavāda*, assigned by him to the period A.D. 1250–1300, quotes it. P.K. Gode claimed that both the *Gandhasāra* and the *Gandhavāda* have been written in the period A.D. 1300–1600.⁴⁷⁵ The resemblances between the contents of the *Gandhasāra* and Māhuka's *Haremekhalā*⁴⁷⁶ suggest that both works do not differ much in date. The *Gandhasāra*, however, gives the impression of being later than Māhuka's work. The data available so far suggest a date not far removed from the twelfth or thirteenth century.

Gopālādāsa Kāyastha

Gopālādāsa Kāyastha, son of Balabhadra, was the author of the *Vaidyavilāsa*.⁴⁷⁷

Gopālādāsa

Gopālādāsa was the author of the *Cikitsāmrta*,⁴⁷⁸ a huge work on āyurveda, a large fragment of which has been preserved.⁴⁷⁹ The names of many of its chapters are recorded at the beginning of the text. The chapter on śārīra is an extract from the *Viṣṇudharmottarapurāṇa*, and that on the names and properties of drugs, in which conflicting views found in the various koṣas are reconciled on the authority of reliable koṣas like the *Śabdārṇava*, etc., is said to be taken from the author's own *Sudhābindu*.⁴⁸⁰ Many local names are recorded in the chapter on drugs.

In the introductory verses of his treatise, Gopālādāsa enumerates a long series of authors and works that were no longer accessible, and for that reason known to him by name only: *Amṛtaghaṭa*,⁴⁸¹ *Amṛtavallikā*,⁴⁸² *Ārogyamañjarī*,⁴⁸³ *Bhīṣaṇmuṣṭī*,⁴⁸⁴ *Bindusāra*, *Bhoja*, *Candraṭa*, *Cikitsākalikā*, *Putrotsavāloka*,⁴⁸⁵ *Ravigupta*, *Siddhasāra*, *Tattvakalikā*,⁴⁸⁶ *Tisāṭa*, *Vaidyapradīpa*,⁴⁸⁷ *Vaidyaprasāra*, *Vyagrādīnaśubhaṅkara*, *Yogarātnakaraṇḍaka*,⁴⁸⁸ and *Yogaśata*. As authors studied by him he mentions Vābhaṭa, Vaṅga (probably Vaṅgasena), Vṛnda, Cakra and Caṅga,⁴⁸⁹ while he also refers to a *Cakrakathā* together with its *Sārakalikā*.

The authorities and works quoted in the preserved part of the *Cikitsāmrta* are: *Amitaprabha*, *Aśvinīkumārasaṃhitā*, *Āyurvedasāra*, *Bhānumatī*, *Bhaṭṭāra*, *Bhavyadatta*, *Bhela*, *Bhoja*,⁴⁸⁹ *Cakra*, *Candrikā*, *Cikitsākalikā*,⁴⁹⁰ *Devīpurāṇa*, *Dīpikā*, *Dṛḍhabala*, *Gadādhara*, *Gayadāsa*, *Govardhana*, *Guṇākara*, *Hārāvālī*,⁴⁹¹ *Hārīta*, *Jejjāda*, *Kauśika*, *Kusumāvalī*, *Mādhava*, *Madhukoṣa*, *Nāgārjuna*, *Nīścalakara*, *Parāśara*, *Patañjali*, *Pavanakuṇḍa*,⁴⁹² *Ratnaprabhā*, *Ravigupta*,⁴⁹³ *Śabdārṇava*,⁴⁹⁴ *Śrīkaṇṭhadatta*, *Trivikramadeva*, *Vābhaṭa*, *Vābhaṭāṭikā*, *Vaidyapradīpa*,⁴⁹⁵ *Vakula*, *Vaṅgasena*, *Vāpyacandra*, *Vijayarakṣita*, *Viṣṇudharmottara*, *Vṛnda*, *Vṛndaṭikā* (by Śrīkaṇṭhadatta), and *Yogarātnākara*.

The authorities most commonly quoted are Śrīkaṇṭha (23 times) and Nīścala (21 times); Gopālādāsa usually agrees with Nīścala against Śrīkaṇṭha when, as often, their conflicting views are recorded.

An unspecified *Cikitsāmrta* is quoted in Govindasena's *Paribhāṣāpradīpa*.

The author

Gopālādāsa was, according to the introductory verses of the *Cikitsāmrta*, a son of Keśava. His wife, called Saṃtoṣā, bore him two sons, Kṛṣṇadāsa⁴⁹⁶ and Gaṅgādāsa, who may have revised their father's work after his death. Copies of the *Cikitsāmrta* were made public by Balabhadra and Bhava, who were probably pupils of Gopālādāsa. Some colophons of the treatise indicate that the author was an antaraṅga of Vindheśvara. Gopālādāsa probably belonged to Bengal, for he records local names of medicinal plants which are still current in Bengal and he quotes many authorities who

lived there. Some verses from the *Cikitsāmr̥ta* prove that the author was a devotee of Viṣṇu.

Date

Gopālādāsa's date depends on that of his son Gaṅgādāsa, author of the *Chandomañjarī* and other works.⁴⁹⁷ P.K. Gode fixed Gaṅgādāsa's date within the period A.D. 1300–1500.⁴⁹⁸ D.Ch. Bhattacharyya discovered additional evidence enabling him to narrow down these limits. The latter examined the MS of a commentary on the *Chandomañjarī* by Jagannātha Sena Kavirāja, son of Jaṭādhara Kavirāja, the names of whose descendants up to the eighth generation were recorded by Bharatamallika in his *Candrapabhā*. As Bharatamallika composed this work about 1675, Jagannātha Sena's date falls late in the fifteenth century and Gaṅgādāsa cannot have lived later than about A.D. 1425. Moreover, Gaṅgādāsa quotes a verse from a play by Kaviśekhara Jyotirīśvarācārya, called *Dhūrtasamāgama*,⁴⁹⁹ written during the reign of the Karmāṇa king Narasiṃha of Mithilā, who ruled in the second quarter of the fourteenth century, which fixes the terminus post quem at about 1350. Thus Gaṅgādāsa must have written his works between 1350 and 1425. This is corroborated by a quotation from one of his treatises in Puṇḍarīkāṅka Vidyāsāgara's *Kalāpadīpikā*,⁵⁰⁰ a commentary on the *Bhaṭṭikāvya*, composed in the late fifteenth century.

Hammīrarāja

Hammīrarāja, son of Samantarāja, is the reputed author of the *Sadyogamuktāvalī*⁵⁰¹ or *Yogamuktāvalī*,⁵⁰² a therapeutic treatise in 179 verses, divided into several chapters (*prakaraṇa*).

This Hammīrarāja is said to be the Cauhān king of Mewār who ruled from 1301 to 1365, and who patronized Rāghava, the grandfather of the author of the *Śārṅgadharapaddhati*.⁵⁰³

Haripāla

Haripāla was the author of (1) a *Vaidyakaśāstra* and (2) a *Yogasāra*.⁵⁰⁴ The *Vaidyakaśāstra* is a therapeutic treatise in 256 Prakrit verses (*gāthā*), completed in 1284/85.

Haripāla was a Jain, as appears from his paying homage to the Tīrthankaras at the beginning of the *Vaidyakaśāstra*. At the end he refers to the *Yogasāra*, which is therefore earlier.

Hemacandra

Hemacandra, the renowned mediaeval lexicographer,⁵⁰⁵ was the author of the *Nighaṇṭuśeṣa*,⁵⁰⁶ written as an appendix to the *vanaspatikāya* section of the *tiryakkāṇḍa* of his *Abhidhānacintāmaṇi* (4.197–267).⁵⁰⁷

Contents⁵⁰⁸

This work, which gives only names of plants and their synonyms, is divided into six sections (*kāṇḍa*), which deal with trees (*vr̥kṣa*; 3–183), shrubs (*gulma*; 184–291), creepers (*latā*; 292–335), vegetables (*śāka*; 336–368), grasses (*tṛṇa*; 369–385), grains, pulse and related plants (*dhānya*; 386–401). This arrangement is new and not found in other *nighaṇṭus*, but it should be noted that Hemacandra was not strict in applying his own scheme. The section on shrubs includes a herb like *apāmārga* (204–205)⁵⁰⁹ and a climber like *jyotiṣmatī* (209);⁵¹⁰ the presence of *rāsnā* in this section (219) may mean that this word designated a shrub according to Hemacandra and not an orchid.⁵¹¹ The section on creepers describes a herb like *kaṭukā* (298–299)⁵¹² and also lotuses and water-lilies (327–334), while the section on vegetables has verses on plants not used as such (*saptalā*, 340cd–341ab; *prasāraṇī*, 341cd–342; *bhṛṅgarāja*, 346cd–347ab).⁵¹³

The number of synonyms given in the *Nighaṇṭuśeṣa* is considerable, many being new.⁵¹⁴ Not only names of plants were recorded in it, but also names of fruits and seeds, etc.⁵¹⁵ In some cases Hemacandra seems to have been misinformed.⁵¹⁶

Hemacandra's sources for the compilation of the *Nighaṇṭuśeṣa* are almost completely unknown, but he may have consulted the *Aṣṭāṅganighaṇṭu*.⁵¹⁷ The subsection on lotuses and water-lilies and the whole sixth section have been taken over almost verbatim from his own *Abhidhānacintāmaṇi* (4.226–248).

The *Nighaṇṭuśeṣa* is quoted as Haima in Bhānuji Dīkṣita's *Rāmāśramī* on the *Amarakoṣa*.⁵¹⁸

Special features

Noteworthy names of plants are: *amilāta* and *amlāta* as synonyms of *saireyaka*⁵¹⁹ (245–246ab); *japā* (149d); *kākakaṅgu* (396a);⁵²⁰ *kalambī* (359ab);⁵²¹ *kāṇḍīra* (= *kuṭannaṭa*; 382);⁵²² *kārpāsī*, *vanyā* (157cd); *karuṇa* (52cd);⁵²³ *kimpāka* (155ab);⁵²⁴ *kolipattra* (= *joraṇa*; 107b);⁵²⁵ *kr̥ṣṇalodhra* (117b); *kumārī* (244); *musālī* (264); *nalī* (= *grāmanalikā*; 375cd);⁵²⁶ *pathikā* (279cd–280ab);⁵²⁷ *rudrākṣa* (141d);⁵²⁸ *śrīhastinī* (355ab);⁵²⁹ *sthalagaṇḍīra* (354ab);⁵³⁰ *tālī* (182ab);⁵³¹ *vapuṣā* as an odourless variety of *hapuṣā* (270ab); *vāripaṇī* (335ab);⁵³² *viṭkhadira* (= *arimeda*; 66). Two types of *amlavetasa* are distinguished (59cd), an inferior (*śaṅkhadrāvaka*) and a superior one (*bāladrāvaka*); two types of *bījaka* are mentioned (101cd), a superior (*śikhigrīva*) and an inferior one (*gomūtraka*); a variety of *vandā* is mentioned that is called *nandīmukha* (159ab).⁵³³

The author and his date

Hemacandra was born in Gujarāt in 1087 or 1088. He took holy orders as a Jain monk in 1097/98, was ordained as a *Sūri* in 1109/10, and assumed the ecclesiastical name of Hemacandra. He spent the greater part of his life at Aṇahillapāṭaka, the ancient capital of Gujarāt, where he was patronized by the Caulukya kings Jayasimha (1093–1142)⁵³⁴ and Kumārāpāla (1142–1173).⁵³⁵ His wide learning made him known as the *Kalikā-lasarvajña*. He died of *sallekhanā* in 1172/73.⁵³⁶ Hemacandra wrote the *Nighaṇṭuśeṣa* after his *Abhidhānacintāmaṇi*, *Anekārthasaṃgraha* and *Deśināmamālā*.⁵³⁷

Śrīvallabhagaṇi's commentary

Śrīvallabhagaṇi was the author of a commentary (ṭīkā) on the *Nighaṇṭuseṣa*.⁵³⁸ He was a pupil of Jñānavimalagaṇi⁵³⁹ of the Kharataragaccha, the author of the *Śabdabhedaprakāśaṭīkā* on Maheśvara's *Śabdabhedaprakāśa*,⁵⁴⁰ and wrote his works at the end of the sixteenth and the beginning of the seventeenth century.⁵⁴¹ The MSS of the *Nighaṇṭuseṣa* that were at the disposal of Śrīvallabha were rather defective.⁵⁴²

The commentary gives for each synonym the etymology, along the lines of Hemacandra's grammar, quotes many passages from technical works, and mentions the Rājasthānī term for each plant.⁵⁴³ In some cases it adds useful information; it distinguishes, for example, between aralu and tuṇṭuka, regarded as one and the same by Hemacandra (85ab), and between meṣaśṛṅgi and vṛścikālī (191–192ab).

Authors quoted or referred to by Śrīvallabha are:⁵⁴⁴ Amara, Amarasiṃha, Bhāguri,⁵⁴⁵ Bhoja, Cāmuṇḍapaṇḍita, Candra,⁵⁴⁶ cāndrāḥ,⁵⁴⁷ Candranandana, Devacandrasūri,⁵⁴⁸ Dhanvantari,⁵⁴⁹ Gauḍa, Indra, Indu, jaināḥ, Kandalikāra,⁵⁵⁰ Kauśika, Kṣīrasvāmin, Madanapāla, Maheśvara, nairuktāḥ, prācyāḥ, Pūrṇatalagaṇa,⁵⁵¹ Śrīdhara, Vācaspati, vaidyāḥ, Vopadeva, and Vyāḍi.

The following works are quoted or referred to by him:⁵⁵² *Abhidhānacintāmaṇi*, *Abhidhānakośa*,⁵⁵³ *Āgama*, *Amaraśeṣa*,⁵⁵⁴ *Amaratīkā*, *Anekārthasaṃgraha*,⁵⁵⁵ *Deśi*, *Deśināmamālā*,⁵⁵⁶ *Kādambarī*, *Kavikalpadruma*, *Mālā*, *Maṅkha*,⁵⁵⁷ *Mekhālā*, *Mīmāṃsābhāṣya*, *Nighaṇṭu*, *Śabdānuśāsana*,⁵⁵⁸ *Śāśvata*,⁵⁵⁹ *Suśruta*, *Vaijayantī*,⁵⁶⁰ *Varṇanighaṇṭa*,⁵⁶¹ *Viśva(kośa)*, *Viśvalocana*,⁵⁶² and *Vopadevadhātupāṭha*.⁵⁶³

Kaiyadeva

Kaiyadeva⁵⁶⁴ was the author of (1) *Nāmaratnākara*,⁵⁶⁵ (2) *Pathyāpathyavibodhaka*,⁵⁶⁶ often referred to as *Kaiyadevanighaṇṭu*, and (3) *Prayogasāra*.⁵⁶⁷

The *Pathyāpathyavibodhaka*⁵⁶⁸ is a large lexicon, containing more than just the names and properties of medicinal substances.

Contents⁵⁶⁹

The work is arranged in eight chapters (varga) with respectively 1,640 (oṣadhivarga), 147 (dhātuvarga), 112 (dhānyavarga), 449 (dravavarga), 237 (kṛtānavarga), 260 (māṃsavarga), 503 (vihāravarga), and 310 (miśrakavarga) verses, making a total of 3,658 verses.

The oṣadhivarga deals with medicinal substances, chiefly of vegetable origin, the dhātuvarga with inorganic and some organic substances, the dhānyavarga with grains, pulse, and some other products. The dravavarga is about liquids; its section on water mentions many names of rivers (51–71). The kṛtānavarga discusses prepared foods, and the māṃsavarga the flesh of various animals. The vihāravarga contains elaborate rules for maintaining health. The miśrakavarga is concerned with diverse subjects: groups of substances (1–19), weights and measures (24–46), medicinal preparations and allied substances (47–177), technical terms (181–215ab), poisons (218cd–226), and names of disorders (246–310).

Little is known about Kaiyadeva's sources. Some verses are taken from the *Suśrutasamhitā*,⁵⁷⁰ Parāśara is quoted once.⁵⁷¹

The *Kaiyadevanighaṇṭu* is quoted in Kṛṣṇadatta's commentary on Trimalla's *Śaṭaśloki*, the commentary by Rāghavabhaṭṭa, called *Padārthādarśa* and written in 1493, on Lakṣmaṇadeśika's *Śāradātīlaka*,⁵⁷² Raghunātha's *Bhojanakutūhala*, the *Śāligrāmānighaṇṭubhūṣaṇa*, and also, profusely, in Śivadatta's auto-commentary on his *Śivakośa*.

A *Pathyāpathyanighaṇṭu*, quoted by Kāśīrāma in his commentary on the *Śāriga-dharasamhitā*, may be the *Kaiyadevanighaṇṭu*.⁵⁷³ Kaiyadeva may also be quoted in the *Nirṇayasindhu*,⁵⁷⁴ Jñānavimalagaṇi's *Śabdabhedaprakāśaṭīkā*,⁵⁷⁵ and the *Ma'din al-Šifā'* by Miyaṇ Bhūwah.⁵⁷⁶

Special features

Interesting medicinal plants are:⁵⁷⁷ ābhā(babūlaka) (1.1088);⁵⁷⁸ airāvati (= vallī-khadira; 1.828cd–829);⁵⁷⁹ alambuṣā (different from muṇḍī; 1.1604);⁵⁸⁰ amlamāriṣa (1.636);⁵⁸¹ amlāyana (1.1525–1526);⁵⁸² āmrāgandhā haridrā (1.1118);⁵⁸³ āri (1.828cd–829);⁵⁸⁴ balācatuṣṭaya (1.1051–1054);⁵⁸⁵ bāluka (1.555);⁵⁸⁶ bhaṅgā (3.94);⁵⁸⁶ bhaṅgikā (1.1636cd–1637);⁵⁸⁷ bhāskarakarpūra (1.1287);⁵⁸⁸ bhūmyupodakā (1.659cd–660ab);⁵⁸⁹ brāhmaṇayaṣṭikā (= bhārgī; 1.1134);⁵⁹⁰ brahmasomā (1.1101cd–1102ab);⁵⁹¹ cauranimbūka (1.328);⁵⁹² devasaṣṭapa (1.976);⁵⁹³ dolaḥphala (= madhūka; 1.455);⁵⁹⁴ elāna (1.509);⁵⁹⁴ gajakarṇī (1.1631–1634);⁵⁹⁵ gandhapriyaṅgu (1.1353cd–1354ab);⁵⁹⁶ the five varieties of guggulu (1.1409cd–1412ab);⁵⁹⁶ gugguluśāka (1.1420cd–1421ab);⁵⁹⁷ hastyāḥluka (1.1626);⁵⁹⁸ himakarpūra (1.1284);⁵⁹⁸ iśāvāsa(karpūra) (1.1283–1284ab);⁵⁹⁹ iśvarī (= nāgadamanī; 1.778);⁵⁹⁹ jalamāriṣa (1.637);⁶⁰⁰ japā (1.1521cd–1522ab);⁶⁰¹ jīvantaka (1.624);⁶⁰¹ kairātacandana (1.1259);⁶⁰² kākāṇḍolā (= kolaśimbī; 1.603);⁶⁰³ kaṇṭakarañja (1.972);⁶⁰⁴ kapitthapatrā (1.419cd);⁶⁰⁵ karambhā (1.801);⁶⁰⁶ karpūratulasī (1.1554);⁶⁰⁷ kāṣṭhālu (1.1626);⁶⁰⁸ kṛṣṇapiṇḍita (1.904);⁶⁰⁹ kucelikā (1.680);⁶¹⁰ kulatthikā (3.78);⁶¹¹ kuntalī (1.651);⁶¹² kuśīṃśapā (1.978);⁶¹³ kuṭhīñjara (1.650);⁶¹⁴ laṭvāka (= vanyakusumbha; 1.639);⁶¹⁵ lavalī (1.510);⁶¹⁶ madhukarkaṭī (1.262);⁶¹⁷ mahābāṣpa (1.805);⁶¹⁸ mahāpiṇḍita (1.904);⁶¹⁹ māṇavaka (1.481);⁶²⁰ mārkandikā (1.1002);⁶²¹ mucakunda (1.1520cd);⁶²² nartaka (= nīvāra; 3.103);⁶²³ palāśikā (= suṣavī; 1.594);⁶²⁴ parṇakarpūra (1.1289);⁶²⁵ parṇapiṇḍita (1.905);⁶²⁶ parpaṭī (1.1428–1429ab);⁶²⁷ pītadru (1.962);⁶²⁸ pītakaravīra (1.1543);⁶²⁹ potāśraya karpūra (1.1285);⁶³⁰ pustaśimbī (1.610);⁶³¹ rājālābu (1.537);⁶³² rājanimbūka (1.328);⁶³³ raktālu (1.1626);⁶³⁴ rāmaṭha (= toyāpāmārga; 1.1037cd–1038);⁶³⁵ śaṅkhālu (1.1626);⁶³⁶ śarkarānimbūka (1.328);⁶³⁷ sarpaḥkṣī (1.691cd–692);⁶³⁸ sindūrī (1.1524);⁶³⁹ śirīśikā (1.980);⁶⁴⁰ snehapiṇḍita (1.904);⁶⁴¹ śvetapiṇḍālu (1.1623);⁶⁴² śvetapiṇḍita (1.903);⁶⁴³ ṭaṅka, anya (1.408);⁶⁴⁴ tuvaraka (1.502cd–503);⁶⁴⁵ urumāṇa (1.507);⁶⁴⁶ vajrakanda (1.1586);⁶⁴⁷ vallīśimba (3.64);⁶⁴⁸ vaṃśakuṭāji (1.893);⁶⁴⁹ vāriparṇī (1.1467cd–1468ab);⁶⁵⁰ vyāghrāṭaka (1.617).⁶⁵¹ Opium is not mentioned by Kaiyadeva.

Noteworthy terms designating diseases and various disorders occurring in the miśrakavarga (8) are: annagranthi = varāṭa = udarāmāya (254); aruṣṭikā = aruṣ = rutpiśī = lomataskarī (251); avākarna = kālamūka (306); bahūllāsa = hikkā (256); chāta = kṛṣa (308); galagaṇḍa = gaṇḍamālā (264); galāṅkura = rohiṇī (264); gaṇḍuka = vikalāṅga

(306); gudagraha = udāvarta (282); guḍaguḍāśabdaḥ saruk = ātopa (284); hemantikā = śītalikā = masūrīkā (263); hṛllāsa and utkleśa are two different disorders (288); Īrma = arus (266); jāṭhāgranthi = prṣṭhāgranthi = guḍa = gulma (264); śuṣkā kaṇḍū = kacchū = rakasā, and bahisravā kaṇḍū = vicarcikā (258cd-259ab); kharva = kharvara = nikharva = vāmana (306cd-307a); khoḍa = jarāvara = khañja (305); kukara = kuṇi (305); mahāspoṭa = vispoṭa (263); malāvarodha = vibandhaka (283); muṣkavṛddhi = kuraṇḍaka = vṛddhi (281); nāha = ādhmāna (283); niścāraka = niścyavana = bimbiśi = pravāhikā (255); padavalmika = ślīpada (261); pratiśyāya is a synonym of rājayakṣman (246); tvakpuṣpa = sidhma (262); udanyā = tṛṣ (251); vardhma = antravṛddhi (281); vātavarodha = viṣṭambha (283); vigra = kṣudranāsika (307b); vikṣobhī = syandī = śī-tavepathu = udarda (285cd-286); yakṣmalālā = mṛṇikā = kaphatantu = syandinī (247); yauvanakaṇṭaka (285ab).⁶⁵²

The disease called somaroga, introduced by Vaṅgasena, is referred to in vihā-ravarga 268.

The author

The author states in his introductory verses that he was a son of the physician Sāra-ṅga⁶⁵³ and a grandson of Padmanābha of Bhāradvājagotra,⁶⁵⁴ who was well versed in various sciences. Kaiyadeva may have lived in Gujārāt.⁶⁵⁵

Date⁶⁵⁶

The terminus ad quem can be determined from Rāghavabhaṭṭa's quotations from the *Kaiyadevanighaṇṭu*, which prove that the work antedates the year 1493. The oldest dated MSS were copied in 1514⁶⁵⁷ and 1514/15.⁶⁵⁸ The lower limit can be deduced from various indications. The references to the diseases masūrīkā, vardhma and somaroga establish that Kaiyadeva is later than Mādhava, Vṛnda, and Vaṅgasena. The description of the plant called pītakaravīra⁶⁵⁹ may indicate a rather late date, since it does not yet occur in the *Madanapāla*- and *Dhanvantarinighaṇṭu*, where only the white and red karavīra are mentioned,⁶⁶⁰ whereas it is recorded in the *Rājanighaṇṭu*.⁶⁶¹ If Kaiyadeva's father was indeed the Sāraṅga who wrote the *Vīrasīmḥāvaloka* for king Vīrasīmha, the upper limit is some decades after the year 1383. The combined evidence indicates that the *Kaiyadevanighaṇṭu* was composed in the period 1400–1450.

Kālidāsa

Kālidāsa was the author of (1) *Vaidyamanoramā*, (2) *Dhārākālpa*, and (3) *Rasasārasaṃcaya*.⁶⁶²

(1) The *Vaidyamanoramā*⁶⁶³ is a concise compendium on therapeutics.

The work consists of about 660 verses and a number of prose passages,⁶⁶⁴ arranged in twenty chapters (paṭala). The verses are written in various metres and their language is simple, but often poetical, and full of similes drawn from mythology.⁶⁶⁵ The treatise is only concerned with therapy.⁶⁶⁶ It contains mostly short prescriptions; complicated formulae are rare.⁶⁶⁷

The pattern at the base of the arrangement of the diseases is not clear, but may have been influenced by Vāgbhaṭṭa; chapters one to twelve are devoted to kāyacikitsā and śalya, thirteen is about gynaecology, fourteen about paediatrics, fifteen is devoted to bhūtavidyā, sixteen to śālākya and śalya, seventeen to various disorders, eighteen to guhyaroga, nineteen to viṣa, and twenty to rasāyana and vājīkaraṇa.

The materia medica is mainly of the classical āyurvedic type, mercurial and metallic preparations being rare, but Kālidāsa added a large amount of religious and magical procedures to his therapeutic armamentarium.⁶⁶⁸ Some recipes which are designated as secret may be regarded as Tantric elements,⁶⁶⁹ as well as the mention of the Iḍā and Piṅgalā (19.6).

Kālidāsa does not refer to his sources⁶⁷⁰ and he is not quoted by later authors.⁶⁷¹

Chapter two, dealing with raktapitta and asṛgdara, includes some verses on asthisṛvā⁶⁷² and somaroga (11–13), diseases said to be characteristic of women and men respectively, which is surprising since somaroga is always described as occurring in women only. Chapter six is remarkable on account of its insistence on the importance of kapharaktātisāra (4.6–7 and 9)⁶⁷³ and kapharaktapravāhaṇa (10–12).⁶⁷⁴ Among the verses of the same chapter devoted to pravāhaṇa (10–15) there is one which mentions bimbiśi (14).⁶⁷⁵ Chapter eight has a verse on the treatment of śayyāmūtra (14). Uncommon diseases from the remaining chapters are svedamasūrīkā (11.24),⁶⁷⁶ aṣṭapadāḥ infesting the human body (11.66–67),⁶⁷⁷ āśyalūtā (16.79–80),⁶⁷⁸ karṇakarmikā (17.6),⁶⁷⁹ and līṅgalūtā (18.2–3).⁶⁸⁰ Diseases left unmentioned are upadāṃśa, śūkadoṣa and the kṣudrarogas.

Uncommon names of plants forming part of Kālidāsa's materia medica are: akimcanādhīpa (16.121),⁶⁸¹ ākulī (7.15, 19, 22),⁶⁸² alarkāri (19.49),⁶⁸³ aranyatulasī (17.12),⁶⁸⁴ bhūmisarpa (18.22),⁶⁸⁵ brahmadāṇḍī (18.11),⁶⁸⁶ gandhalakṣmī (13.42),⁶⁸⁷ haritamāñjarī (6.28 and 72; 19.40),⁶⁸⁸ jharasī (4.5),⁶⁸⁹ kabārī (16.67),⁶⁹⁰ kāraskara (6.3; 11.56; 12.27; 13.26),⁶⁹¹ karpūravallī (11.37),⁶⁹² kikkisa (7.22; 16.121),⁶⁹³ kṣudranātha (16.105),⁶⁹⁴ kṣudrapapphaṇa (7.7),⁶⁹⁵ kukkuṭaniṣpāva (16.118),⁶⁹⁶ nagnajit (7.17; 11.43),⁶⁹⁷ papphaṇa (8.5),⁶⁹⁸ phalālikā (19.55),⁶⁹⁹ pūlāsa (7.18 and 21; 11.33),⁷⁰⁰ rāhūcchiṣṭa (3.24),⁷⁰¹ raktalaśuna (6.28),⁷⁰² raktapuccha (19.55),⁷⁰³ sāgarā (7.21),⁷⁰⁴ śākinī (7.17; 16.110),⁷⁰⁵ sīmhalī (3.8),⁷⁰⁶ sthalaśṛṅgāṭa (7.3),⁷⁰⁷ śvetaparnāsa (6.30),⁷⁰⁸ śvetapūlāsa (16.9 and 57),⁷⁰⁹ talapoṭa (16.39),⁷¹⁰ triśūlī (16.60),⁷¹¹ vairī (7.17),⁷¹² vātāmūlī (11.34),⁷¹³ yakṣadrś (6.32; 8.5 and 16; 16.46), yakṣākṣī (6.31), yakṣalocana (6.6), yakṣanetra (6.15).⁷¹⁴ Opium (6.3: ahiphena) and mercury (11.21; 18.9, 20, 21, 25) are prescribed by Kālidāsa.⁷¹⁵

(2) The *Dhārākālpa*⁷¹⁶ describes in twenty-seven verses a therapeutic procedure called dhārā, in which a fatty liquid, dripping from a suspended vessel, is applied to the body of a patient.⁷¹⁷

The maṅgala (1) is addressed to Gaṇeśa. The work deals with the beneficial effects of dhārā (2), the types of wood for the construction of the droṇī, i.e., the wooden frame in which the patient lies down (3), the dimensions of this droṇī (4), the auspicious time for beginning the treatment and the ceremonies to be performed (5), the vessel, called karaka, used for anointing the head of the patient (6), the qualities of the attendants and

the substances to be used for the dhārā, i.e., sesamum oil, ghee, or a mixture of these (7–8), the four types of anointing the head of a patient preparatory to a dhārā with takra, i.e., diluted buttermilk (9), the takradhārā (10), vessels to be used for a dhārā (11), the treatment of a patient after the application of a dhārā (paścātkaṛman; 12), the effects of a takradhārā (13) and of a dhārā with sesamum oil and ghee (14), sneha and sveda (15–16), the duration of the treatment with dhārā and the prescribed height of the suspended vessel (17–18), faulty applications of a dhārā and the ways to remedy these (19–20), rules for the application of milk and dhānyāmla to the body of a patient (21), the right periods of time for the treatment and when it should not be performed (22), the after-treatment (paścātkaṛman; 23–24), behavioral rules for a patient during the treatment (25–26), and indications for treatment with dhārā (27).

One of the trees said to be suitable for the construction of a droṇī is called ḍolā.⁷¹⁸

(3) Information on the *Rasasārasaṃcaya* by Kālidāsa is not available.

The author

No particulars are known about Kālidāsa. He may be regarded as originating from Kerala on account of his mentioning a number of medicinal plants used in that region, and because he wrote the *Dhārākālpa*, which describes a therapeutic procedure that has always been in vogue there. He calls himself a devotee of Śiva (20.24).⁷¹⁹

Date

As Kālidāsa probably borrowed a formula from Soḍhala, he is later than about 1200, and his reference to the disease called asthīrāva, also mentioned in the *Ārogyacintāmaṇi*, may indicate that he belongs to the same period as Dāmodara. A terminus ad quem cannot be determined, but his therapeutic procedures and materia may well confirm that he belonged to the fourteenth century.⁷²⁰

Kalyāṇadāsa

Kalyāṇadāsa was the author of the *Śabdaratnapradīpa* or *Ratnapradīpanighaṇṭu*.

This work is a homonymic lexicon, the catchwords being recorded in the alphabetical order of their first letters (from a to kṣa).

It was composed by Kalyāṇadāsa, son of Nāmadeva and grandson of Lakṣmīdhara, who resided at Bahādurapura during the reign of Yādava Tulasīdāsa, son of Gopāla and founder of that city, possibly towards the end of the thirteenth century. The work was written at the instance of the author's guru, Kāśīrāma, a Sārasvata brāhmaṇa of Bhāradvājagotra and a renowned physician in Mathurā, son of Mathurādāsa and grandson of Gurudāsa of Argalā.⁷²¹

Kānhaḍadeva

Kānhaḍadeva, son of Padmanābha, wrote the *Karmavipākāsārasaṃgraha* or *Sāragrāhakarmavipāka* in 1384. Karṇasiṃha, a minister of Durgasiṃha who was a son of

Bhūpāla, was the partner of the author.⁷²²

Kedārabhaṭṭa

See: *Vaidyaratna*.⁷²³

Keśava

Keśava was the author of the *Siddhamantra*,⁷²⁴ a nighaṇṭu in 169 verses of diverse metres, called thus since, like a siddhamantra, in spite of its very small size, it is very efficient in enabling one to know the power of drugs.⁷²⁵ Keśava's son, Vopadeva, wrote a commentary on it, called *Siddhamantraprakāśa*.⁷²⁶

Contents and special features⁷²⁷

The actions of a good number of drugs are described in a new way by Keśava, who concentrates on their effects on the doṣas, leaving aside their rasa, vīrya and vipāka, which can be inferred.⁷²⁸ Though the most common type of nighaṇṭu usually specifies the rasa, vīrya and vipāka of a medicinal substance first, the effect on the doṣas is mostly mentioned as well, together with a number of other properties. Bearing this in mind, the *Siddhamantra* is of a new type in exclusively taking notice of what is called the doṣaprabhāva and enlarging upon this subject, which makes it a very interesting work.

The first nine verses, called navaśloki in the commentary, are, apart from the two introductory stanzas, concerned with a short exposition on the general principles adopted in the book. In verse five the author declares that his book will resolve the problems arising from the mutually conflicting views of Caraka, Suśruta, and Khāraṇādi⁷²⁹ concerning the actions of drugs. It can be concluded from verses six to eight⁷³⁰ that fifty-seven types of drugs are distinguished in relation to their effects on the doṣas.⁷³¹ A special category among the actions of drugs, as a result of which the doṣas are neither alleviated nor provoked, but which may contribute to the one or the other outcome, depending on accompanying circumstances, is called udāsīna.⁷³²

Verse nine gives the subjects of the eight vargas into which the treatise is divided: (1) vātaghnavarga, (2) pittaghnavarga, (3) kaphaghnavarga, (4) vātapittaghnavarga, (5) kaphavātaghnavarga, (6) kaphapittaghnavarga, (7) doṣaghnavarga, (8) doṣalavarga. These vargas list drugs with an action contrary to one (1–3), two (4–6) or all three doṣas (7), whereas varga eight enumerates drugs provoking these. The treatise ends with a concluding verse and one containing information on the author.⁷³³

Keśava and the *Siddhamantra* are quoted by Śivadatta in his auto-commentary on the *Śivakoṣa*.⁷³⁴

An *Āyurvedaprakāśa* by Paṇḍitakeśava, who may or may not be the author of the *Siddhamantra*, is quoted by Hemādri.⁷³⁵

The author

The last verse of the *Siddhamantra* reveals the author's name, Keśava, and that of his

father, Mahādeva, the name of his teacher in medicine, Bhāskara, and finally that of the king by whom he was honoured, Siṃharāja. Additional information is given in his son's commentary on this verse: Mahādeva was a brāhmaṇa, living in Mahārāṣṭra; Bhāskara was a brāhmaṇa as well, living in Vedapura,⁷³⁶ the capital of the country; Siṃharāja was the king of Daṇḍaka.⁷³⁷

Date

Since Keśava appears to have been the royal physician of Siṃharāja, who is usually identified with Siṃhaṇa or Singhaṇa II, one of the Yādava kings of Devagiri,⁷³⁸ who reigned from A.D. 1210 to A.D. 1247,⁷³⁹ he lived during the first half of the thirteenth century.⁷⁴⁰

Lakṣmaṇa Paṇḍita

Lakṣmaṇa Paṇḍita, a Jain, son of Vallabha,⁷⁴¹ was the author of the *Vaidyavallabha*.⁷⁴² He wrote this work at the request of Bukka II (1404–1406) of the Vijayanagar kingdom, to whom he was a personal physician (prāṇacārya).⁷⁴³

The Lakṣmaṇotsava

The *Lakṣmaṇotsava*⁷⁴⁴ is an encyclopaedic work on medicine⁷⁴⁵ of about 4,000 verses, arranged in sixty-four chapters,⁷⁴⁶ and completed in A.D. 1449/50.⁷⁴⁷

Chapters one to twelve describe: (1) the genealogy of the author's patron,⁷⁴⁸ (2) anatomy (sāira), (3) dinacaryā, (4) ṛtucaryā, (5) weights and measures (paribhāṣā), (6) the purification of the dhātus (dhātuśodhana), (7) times for administering medicines (bhaiṣajyakālādinirūpaṇa), (8) dreams (svapnalakṣaṇa), (9) the examination of the pulse (nāḍiparikṣā), (10) karmavipāka, (11) a list of diseases (sarvarogagaṇanā), and (12) the aetiology of the diseases (sarvaroganidāna). Chapters thirteen to fifty-nine deal with the diseases and their treatment, generally in agreement with Mādhava's order, but with the omission of chapters on apasmāra, hṛdroga, mūtrāghāta, aśmarī, udara, vṛddhi, vidradhi, śārīravraṇa, sadyovraṇa, bhagna, nāḍīvraṇa, upadaṃśa, śūkadoṣa, amlapitta, and masūrikā. The last five chapters are about vājīkaraṇa, rasāyana, pañcakarman, dīpanapācanādi (technical terms for particular actions of medicines), and miscellaneous subjects (miśrakavarga).⁷⁴⁹

Sources referred to in the introductory verses (1.39) are Atri, Bheḍa, Caraka, Nityanātha, Suśruta, and Vāgbhaṭa.

The *Lakṣmaṇotsava* is quoted in Ananta's *Pratāpakalpadruma*, Dattarāma's *Bṛhadrasarājasundara*,⁷⁵⁰ Cāmuṇḍa's *Jvaratimirabhāskara*, and in the *Yogarātnākara*.⁷⁵¹ It is referred to in Nidhi's *Yogasamuccaya*.

A *Vaidyasarvasva* is also ascribed to Lakṣmaṇa, son of Amarasiṃha.⁷⁵²

Verses nine to thirty-nine of chapter one give a detailed genealogy of the author's patron Lakṣmaṇa,⁷⁵³ a kāyastha of the Māthura class, residing in Mathurā, and a son of Amarasiṃha.⁷⁵⁴ The stanzas in praise of this Lakṣmaṇa mention that he had a tank (dīrghikā) and a rest-house (dharmaśālā) constructed in Navagrāma.⁷⁵⁵ Lakṣmaṇa's fa-

ther, Amarasiṃha, held some high position at the court of Mahamandakhāna,⁷⁵⁶ a Śāka king (śākeśa, śākottama), who was still reigning at Śrīpatha⁷⁵⁷ when the *Lakṣmaṇotsava* was composed. With regard to the authorship of the work, it appears that a certain Vedaśarman, who derived his medical knowledge from an extensive work by Kṣemaśarman,⁷⁵⁸ dictated it to one Puruṣottama who perhaps revised it.⁷⁵⁹ Two more persons, courtiers of Lakṣmaṇa, may have contributed to its composition.⁷⁶⁰

Lohaṭa

Lohaṭa, son of Padma and pupil of Milhaṇa, who wrote the *Cikitsāmṛta*, was the author of the *Cikitsārnavasamhitā*.⁷⁶¹ Since Milhaṇa belongs to the first half of the thirteenth century, Lohaṭa is somewhat later.

The Madanapālanighaṇṭu

The *Madanapālanighaṇṭu*⁷⁶² is also called *Madanavinoda*,⁷⁶³ *Madanavinodanighaṇṭu*,⁷⁶⁴ *Madanapālavinoda*,⁷⁶⁵ *Madanapālavinodanighaṇṭu*,⁷⁶⁶ *Madananighaṇṭu*,⁷⁶⁷ and probably *Madanaratnanighaṇṭu*.⁷⁶⁸ The work is attributed to king Madanapāla who, according to tradition, wrote a number of treatises on various subjects.⁷⁶⁹ It is said to have been popular in the Northwestern provinces of India up to relatively recent times.^{770 771}

Contents⁷⁷²

This nighaṇṭu contains 1,466 verses,⁷⁷³ arranged in thirteen vargas.⁷⁷⁴ The medically relevant verses are mostly śloka, whereas the introductory and concluding stanzas, as well as the first and the last ones of the majority of the vargas, are for the greater part in a longer metre. The verse at the end of the vargas is similar in most of them, ascribes the authorship to king Madana, and gives the name of the varga. The introductory verses praise Viṣṇu, Gaṇeśa, Sūrya and Kāśirāja, while the first verse of the remaining vargas extols Viṣṇu or Kṛṣṇa in beautiful language. The work ends with a genealogy of Madanapāla (13.92–98), followed by the standard verse concluding a varga, and, finally, a verse with the date of composition.

The text of the treatise enumerates the synonyms of medicinal substances together with their properties,⁷⁷⁵ while at the end various other subjects are dealt with, as is usual in a nighaṇṭu. The contents are as follows: (1) abhayādivarga, vegetable drugs, beginning with haritakī (abhayā); (2) śuṇṭhyādivarga, spices and condiments, including the types of salt, etc.; (3) sugandhidravavarga, fragrant substances; (4) suvarṇādivarga, metals, minerals, gems, etc.; (5) vaṭādivarga, trees; (6) phalādivarga, fruits; (7) śākavarga, vegetables; (8) pāṇīyādivarga, liquids; (9) ikṣukādirasavarṇana, products of the sugarcane and related substances, together with honey; (10) dhānyagūṇavarṇana, grains and pulse; (11) dhānyakṛtānnādināmavarga, prepared foods; (12) māṃsavarga, the flesh of various animals; (13) miśrakavarga, on dinacaryā, ṛtucaryā, and related subjects.

The *Madanapālanighaṇṭu* is quoted in the *Āyurvedābhisāra*, Bhāva-miśra's gloss-

es on the *Bhāvaprakāśa*, Jñārasarāmaśarma's *Anupānadarpaṇa*, Kāśīrāma's commentary on the *Śāringadharasamhitā*, Chalāri Nṛsiṃha's *Smṛtyarthasāgara*,⁷⁷⁶ Kāśīrāma's commentary on the *Śāringadharasamhitā*,⁷⁷⁷ Khare's commentary on the *Rasaratna-samuccaya*,⁷⁷⁸ the *Rājanighaṇṭu*, the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Bṛhannighaṇṭuratnākara*, Priyavrat Śarmā's auto-commentary on his *Dravyaguṇasūtra*, Śivadatta's auto-commentary on the *Śivakoṣa*,⁷⁷⁹ Śrīvallabhagaṇi's commentary on Hemacandra's *Abhidhānacintāmaṇi*,⁷⁸⁰ and *Nighaṇṭuseṣa*, Trimalla's *Yogatarāṅgiṇī*, Vaidyārāja's *Sukhabodha*, and Vallabhahṭa's commentary on the *Jvaratrisatī*. It was one of the sources of Raghunāthaji's *Nighaṇṭusamgraha*, of the chapters on materia medica of Ṭoḍara's *Āyurvedasaukhya*, the nighaṇṭu section of Trimalla's *Bṛhadyogatarāṅgiṇī*, and the *Sataśloki* of Trimalla.⁷⁸¹

Special features

Noteworthy names of drugs found in the *Madanapālanighaṇṭu* are:⁷⁸² ahiphena (opium; 1.345), ākāśavallī (1.262),⁷⁸³ āllūka (6.66),⁷⁸⁴ amṛta(phala) (6.59–60),⁷⁸⁵ añjīra (6.67),⁷⁸⁶ āramāśitalā (1.311),⁷⁸⁷ asthiśrīkhalikā (7.83),⁷⁸⁸ balāmoṭā (1.315),⁷⁸⁹ bhaṅgā (1.333),⁷⁹⁰ cauḥāra (2.35),⁷⁹¹ chilīhiṇṭha (1.346),⁷⁹² citrakandaka (7.79),⁷⁹³ diṇḍisa (7.32),⁷⁹⁴ elāphala (6.65),⁷⁹⁵ gaṇḍadūrvā (1.336),⁷⁹⁶ ghanāgamabhavā(vallī) (7.58),⁷⁹⁷ jāsada (4.12),⁷⁹⁸ jayapāla (1.114),⁷⁹⁹ kāliṅga (different from kuṭaja; 7.9),⁸⁰⁰ kāñcanī (1.334),⁸⁰¹ kañcukā (7.86),⁸⁰² kapitthapattī (6.92),⁸⁰³ karmaraṅga (6.85),⁸⁰⁴ keyūra (different from hrīvera; 7.95),⁸⁰⁵ kharbūja (6.53–54),⁸⁰⁶ khasatila (1.344),⁸⁰⁷ kiñkiṇī (6.43),⁸⁰⁸ kolaśimbī (7.33),⁸⁰⁹ kubjakā (3.88),⁸¹⁰ kukkuradru (1.312),⁸¹¹ kumārī (1.331),⁸¹² kuṭīra (7.52–53),⁸¹³ laghudrākṣā (6.5),⁸¹⁴ madhukarkaṭikā (6.79),⁸¹⁵ māṃsarohiṇī (1.320),⁸¹⁶ parpaṭī (3.71),⁸¹⁷ phoga (7.42),⁸¹⁸ rājapaṭolīkā (7.45),⁸¹⁹ śamiṣikā (5.66),⁸²⁰ sārāmla (6.83),⁸²¹ śilemānī (6.21),⁸²² sindūrī (3.106),⁸²³ sthūlakanda (7.88),⁸²⁴ śvetavārtaku (7.24),⁸²⁵ tirigicchi (5.63),⁸²⁶ tumbī, miṣṭā (7.10),⁸²⁷ tuṇṭuka (different from śyonāka; 7.57),⁸²⁸ vallakanda (7.59),⁸²⁹ vandhyākarkoṭakī (1.273–274),⁸³⁰ vāsantī (3.91),⁸³¹ vaṭapattī (1.26),⁸³² viṣatinduka (6.40–42),⁸³³ and vuṣa (3.98).⁸³⁴

Especially to be noted is the presence of bhaṅgā, khasatila, ahiphena, and jāsada⁸³⁵ in this list. Moreover some drugs are mentioned which were also included in Vopadeva's *Hṛdayadīpaka*: asthisamphāraka (1.321), hijjala (5.19), babūla (5.33; = babbūla), karañjī (5.62; = karañjikā), and jalakanda (7.89).⁸³⁶

The author

The works attributed to Madanapāla were probably not written by this person of royal lineage himself, but under his patronage by authors who are only partially known. One of these was Viśveśvara Bhaṭṭa (1360–1390),⁸³⁷ who composed the *Madanapārijāta*, a treatise on dharmaśāstra, sometimes ascribed to Madanapāla,⁸³⁸ and the *Mahārṇava*.⁸³⁹ This Guṇākara Viśveśvara, son of Vācaspati (author of the *Ātaṅkadarpaṇa* on the *Mādhavanidāna*), may have composed the *Madanapālanighaṇṭu* or have assisted Madanapāla in writing it.⁸⁴⁰

The genealogy of Madanapāla can be reconstructed from verses at the end of the *Madanavinoda*.⁸⁴¹ Madanapāla was a younger brother of Sahajapāla; both were

sons of Sādhārāṇa,⁸⁴² son of Hariścandra, son of Bharahapāla,⁸⁴³ son of Ratnapāla. Madanapāla was the father of two sons, who are both credited with a medical treatise; a paediatric text, *Śiśurakṣāratna*,⁸⁴⁴ is ascribed to the elder, Prthvīmalla, and the *Mahārṇava*⁸⁴⁵ to the younger, called Māndhātara. The descent of Madanapāla is confirmed by the introductory verses of the *Śiśurakṣāratna* where, however, Sahajapāla has remained unmentioned.⁸⁴⁶ The genealogy can be supplemented by data from the *Rasaratnapradīpa* by Rāmarāja, son of Ratnapāla, a descendant of Madana. The introductory verses of this treatise state that Madana, son of Sādhārāṇa, son of Haricandra, had two elder brothers, Lakṣmaṇasiṃha, the eldest, and Sahajapāla.⁸⁴⁷

Madanapāla belonged to the family of Ṭāka or Ṭākā kings,⁸⁴⁸ who ruled in Kāṣṭhā⁸⁴⁹ on the Yamunā, to the north of Delhi.⁸⁵⁰ Madanapāla's viruda was kaṭaramalla.⁸⁵¹

Date

The last verse gives the date of composition of the work: Monday, 8 January 1375.⁸⁵²

Mādhavakavi

Mādhavakavi was the author of the *Mādhavadravyaguṇa*, also called *Bhāvasvabhāvavāda*.^{853, 854}

Contents

This treatise, containing 866 verses,⁸⁵⁵ is mainly about the medicinal qualities of dietetic substances. It does not list their synonyms, but a number of drugs are also dealt with in its first chapter. The sources of the work are enumerated in two verses found only at the end of one of the MSS.⁸⁵⁶ These sources are Bheda, Caraka, Haricandra, Hārīta, Parāśara, Suśruta, Vāgbhaṭa, and Vaideha.

Mādhava's *Dravyaguṇa* is divided into the considerable number of twenty-nine chapters (varga).⁸⁵⁷ It is closely related to Cakrapāṇi's *Dravyaguṇa* and shares a large number of verses with that treatise, at least a quarter according to my provisional estimate, though also many differences can be noted. Mādhava's text is larger than that by Cakrapāṇi with regard to the number of verses and the number of chapters. Cakrapāṇi's dhanyavarga was, for example, broken up by Mādhava into a śāli-, kudhānya- and śimbīdhānyavarga, the māṃsavarga into a māṃsa- and matsyavarga, and the madyavarga into a madya-, kāñjika-, and mūtravarga. Mādhava's large first chapter on drugs (vividhaśādhivarga) is absent from Cakra's text, as well as the śreṣṭha-⁸⁵⁸ and the rasavarga.

The arrangement of the drugs in the first chapter has been influenced by the *Suśrutasaṃhitā* and Vāgbhaṭa's *Aṣṭāṅgasamgraha* according to P.V. Sharma,⁸⁵⁹ who also suggested that Mādhava has borrowed from the *Soḍhalanighaṇṭu*.⁸⁶⁰

Mādhava's *Dravyaguṇa* became a well-known work, as appears from its being quoted in Ādhamaṭṭa's *Dīpikā* on the *Śāringadharasamhitā*,⁸⁶¹ Hemādri's *Āyurvedarāsāyana*,⁸⁶² Kṛṣṇadatta's commentary on Trimalla's *Sataśloki*,⁸⁶³ Lakṣmīrāma's commentary on the *Siddhabhṛṣajamaṇimālā*, Niścala's *Ratnaprabhā*,⁸⁶⁴ Śivadā-

sasena's *Tattvacandrikā*⁸⁶⁵ and commentary on Cakrapāṇi's *Dravyagūṇa*⁸⁶⁶ and Vopadeva's *Siddhamantraprakāśa*.⁸⁶⁷ P.V. Sharma⁸⁶⁸ claims that the *Mādhavadravyagūṇa* is copiously quoted by Śivadatta Miśra in his auto-commentary on the *Śivakośa*; this, however, is an error, for these quotations are from the *Paryāyaratnamālā*.⁸⁶⁹ Vandyaghaṭṭiya Sarvānanda quotes, without naming Mādhava as his source, a portion of a well-known verse from the *Mādhavadravyagūṇa* in his commentary on the *Amarakośa*.⁸⁷⁰ One of the verses of Mādhavakavi's work (śākhavarga 29) attained great popularity and has been quoted by many commentators.⁸⁷¹ The whole of Mādhava's text was incorporated in Ṭoḍarānanda's *Āyurvedasaukhyā*.⁸⁷²

Special features

Noteworthy is the description of the following drugs: jayapāla (vividhaṣadhi 28), bhaṅgā (vividhaṣadhi 63),⁸⁷³ āphūka, i.e., opium (vividhaṣadhi 110),⁸⁷⁴ khasatila, i.e., poppy seeds (vividhaṣadhi 111), śatāluka (phala 10),⁸⁷⁵ madhukarkaṭikā (phala 30), a variety of date called śilemānī (phala 46),⁸⁷⁶ amṛtaphala (phala 62), hastikarkoṭaka (śāka 31),⁸⁷⁷ and piṇyākī (śāka 67).⁸⁷⁸

The author

Until comparatively recent times it was often supposed that one and the same author, called Mādhava, was responsible for the composition of the *Rogaviniścaya* and the *Dravyagūṇa*, while, moreover, *Dravyagūṇa* and *Bhāvasvabhāva* were regarded as different works.⁸⁷⁹ N.N. Das Gupta (1936–37: 155) on the other hand, regarded, long ago, the *Bhāvasvabhāva* as written by a Mādhava who was later than the author of the *Rogaviniścaya*. The edition of the text by P.V. Sharma has dissolved the confusion and uncertainty, making it clear that *Mādhavadravyagūṇa* and *Bhāvasvabhāva* are two titles of the same work by an author who calls himself Mādhavakavi. P.V. Sharma also tried to reconstruct the genealogy of the author of the *Mādhavadravyagūṇa*. He supposed that Th. Aufrecht⁸⁸⁰ had described Mādhava, author of the *Dravyagūṇa*, as the son of Cakradatta, grandson of Śrīkaṇṭhadatta, and father of Puruṣottama, but this is a wrong interpretation, since Aufrecht refers in this way to the genealogy of Puruṣottama, author of a *Dravyagūṇa*.⁸⁸¹ P.V. Sharma, proceeding on this wrong track, observed that Aufrecht's data are confirmed by a MS of Puruṣottama's *Dravyagūṇa*,⁸⁸² in which the author calls himself son of Mādhava, grandson of Cakradatta, and great-grandson of the Śrīkaṇṭhadatta who wrote commentaries on the saṃgraha's of Vṛnda and Mādhavakara. It is extremely unlikely that Puruṣottama's father was the author of the *Mādhavadravyagūṇa*, for Puruṣottama, who eulogizes Śrīkaṇṭhadatta, would not have remained silent about his father's well-known work. Moreover, the number of authors called Mādhava is exceedingly large. It must accordingly be concluded that no details concerning Mādhavakavi are known. His title kavi may, if interpreted as an abbreviation of Kavirāja, indicate that he belonged to Bengal.⁸⁸³

Date

One of the MSS utilized by P.V. Sharma for his edition of the *Mādhavadravyagūṇa* was copied in 1452.⁸⁸⁴ The quotations by Vopadeva and Hemādri indicate that the treatise

was known in the second half of the thirteenth century. Niścalakara was also acquainted with Mādhava's *Dravyagūṇa*, which establishes that it was written before 1150–1200. If it is accepted that Vandyaghaṭṭiya Sarvānanda knew the work and quoted from it, the date of its composition is earlier than 1159/60.⁸⁸⁵ Due to its affinity with Cakrapāṇi's *Dravyagūṇa*, which may have been one of its main sources, it cannot be earlier than the third quarter of the eleventh century.

P.V. Sharma claims that Mādhavakavi's work dates from about 1250.⁸⁸⁶ He disregards the quotation by Vandyaghaṭṭiya Sarvānanda⁸⁸⁷ and bases his date on the following arguments. Firstly, many verses from Mādhava's work tally with verses from the *Soḍhalanighaṇṭu*. As admitted by P.V. Sharma himself, it is also possible that both authors derived their information from a common source or that Soḍhala borrowed from Mādhava.⁸⁸⁸ Secondly, he applies the genealogy of Puruṣottama, son of Mādhava and great-grandson of Śrīkaṇṭhadatta, to the establishment of the date of Mādhavakavi. Since he places Śrīkaṇṭhadatta in the early thirteenth century, he regards Mādhavakavi as belonging to a later part of the same century.⁸⁸⁹ As already discussed, this line of reasoning is unacceptable. Thirdly, P.V. Sharma adduces internal evidence to corroborate his chronology. This evidence, consisting of the description of jayapāla, bhaṅgā, āphūka and śilemānī (kharjūrikā) in the *Bhāvasvabhāva*, cannot be regarded as decisive, because bhaṅgā is prescribed by Vaṅgasena and āphūka is found in Soḍhala's *Gadanigraha*.⁸⁹⁰ Moreover, the external evidence is strongly in support of an earlier date.⁸⁹¹

Commentary

A commentary, called *Vaidyavallabhā*,⁸⁹² on the *Bhāvasvabhāva* was written by Meghadeva, son of Ravinābha.⁸⁹³ This commentator ascribes the work to Mādhavakara and states at the end of each varga that the explanations, proposed by Meghadeva, son of Ravinābha, were redacted by Indumatī, whom Cordier⁸⁹⁴ inclined to identify with Indu, the commentator on Vāgbhaṭa's works.

The authorities quoted by Meghadeva are: āgamikāḥ, *Candrikā* (= *Nyāyacandrikā*), Devarāja, Gadādhara, Gayacandra (= *Gayadāsa*), Gayin, Jejjāta, Kharanāda, Kṛśasūśruta, Nala, *Sārasvatanighaṇṭu*, Vāpyacandra, Viṣṇugupta, and Yogaratna. Since Aruṇadatta⁸⁹⁵ was also among Meghadeva's sources, his date cannot be earlier than the second half of the twelfth century. The reference to the *Sārasvatanighaṇṭu* may mean that he is much later.

Maheśvara

Maheśvara, the author of the *Viśvaprakāśa*, *Śabdabhedaprakāśa*, and a lost *Sāhasāṅkacarita*,⁸⁹⁶ is credited with a *Cikitsāṇava*.⁸⁹⁷

Maheśvara, who wrote his *Viśvaprakāśa* in 1111/12, records in its introduction that he is a son of Śrī Brahma or Brāhma and a grandson of the physician Kṛṣṇa. Among his ancestors are the physician Keśava, Vācaspati, the physician Dāmodara, the physician Śrīkṛṣṇa who was attached to the royal court at Gādhīpura, and Haricandra⁸⁹⁸ who was the court physician to Sāhasāṅka and the author of a commentary on the *Carakasam-*

hitā.⁸⁹⁹

A medical author called Maheśvara is quoted in Herambasena's *Gūḍhabodha-kasapgraha*, Kavikaṇṭhahāra's *Prayogaratnākara*, and (as Māheśvara) in Mādhava Kavirāja's *Mugdhabodha*.

Milhaṇa

Milhaṇa compiled his extensive *Cikitsāmrta* at Delhi in 1224, during the reign of Śams-ud-Dīn Iltutmish. He wrote it for his pupils Gaṅgādhara, son of Deveśvara, and Lohaṭa,⁹⁰⁰ son of Padma, being encouraged by Madana (or Mādhava) of Agrota family, the guru of Arjunavarman, king of Mālwa. Milhaṇa was the son of Kuloddhāra of the Jāyasa family, a branch of the royal family of Śūrasena; it came from Tribhuvanagiri, founded by Tribhuvanapāla.⁹⁰¹

An unspecified *Cikitsāmrta* is quoted in the *Bhesajjamañjūsānnaya*, Govindase-na's *Paribhāṣāpradīpa*, and Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*.⁹⁰²

Momahaṇa

Momahaṇa was the author of the *Momahaṇavilāsa*, a treatise of 8,000 verses,⁹⁰³ arranged in eleven chapters (adhikāra), on aphrodisiacs, gynaecology, and obstetrics.

The chapters deal with (1) śukravṛddhikarauśadhādi; (2) śukrastambhakaūśadhā; (3) līṅgavṛddhidārḍhya; (4) līṅgastabdhakārakaūśadhā; (5) śaṇḍhatvanāśakaūśadhā; (6) vandhyātvanāśakaūśadhā, garbharaḥśārthaṃ mantrauśadhāprayogaḥ, bhagasam-kocavidhi, strīroga-cikitsādi; (7) bālarogacikitsopayogyauśadhamantrādi; (8) bālagra-hacikitsā; (9) and (10) dākinīcikitsādi; (11) bālagraḥādinivāraṇārthaṃ katipayama-natrokti, māheśvarādihūpanirmāṇavidhi.⁹⁰⁴

Momahaṇa was a son of Prayāgādāsa, a kṣatriya of Kālpi, and a grandson of Harivāghala.⁹⁰⁵

The *Momahaṇavilāsa* was composed in 1411/12, during the reign of Mahmūd Shāh, the son of Fīrūz Shāh Tughluq (1351–1388).⁹⁰⁶

The *Kakṣapuṭa* by Siddha Nāgārjuna

The *Kakṣapuṭa*,⁹⁰⁷ ascribed to Siddha Nāgārjuna, is a Tantric treatise on ṣaṭkarman.⁹⁰⁸

Contents⁹⁰⁹

The work consists of more than 500 verses and some prose,⁹¹⁰ arranged in twenty chapters (paṭala). The subjects are listed in chapter one: vaśya,⁹¹¹ ākarṣaṇa, stambha, moha, uccāṭa, māraṇa, vidveṣa, vyādhikaraṇa,⁹¹² paśusasyārthanāśana,⁹¹³ kautuka, indrajāla, yakṣiṇīmantrasādhana, ceṭaka,⁹¹⁴ añjana, divya, adṛśya, pādukāgati, guṭikā,⁹¹⁵ khecaratva,⁹¹⁶ mṛtasamjīvana,⁹¹⁷ etc. (1.11cd–13).⁹¹⁸

The titles of the chapters are: (1) mantrasādhana (111 verses); (2) sarvavaśi-karaṇa⁹¹⁹ (47 verses); (3) rājavaśīkaraṇa⁹²⁰ (25 verses); (4) strīvaśyādidrāvaṇa (73

verses); (5) pativaśya⁹²¹ (21 verses); (6) ākarṣaṇa⁹²² (13 verses); (7) tatistambhana⁹²³ (65 verses); (8) saṇyastambhana⁹²⁴ (21 verses); (9) mohana and uccāṭana⁹²⁵ (30 verses); (10) māraṇa⁹²⁶ (20 verses); (11) vidveṣaṇa⁹²⁷ (61 verses); (12) kautuka⁹²⁸ (21 verses); (13) indrajālavidyāsādhana⁹²⁹ (75 verses); (14) yakṣiṇīsādhana⁹³⁰ (33 verses); (15) sarvāñjanādinidhidarśana⁹³¹ (48 verses); (16) nidhivaśīkaraṇa⁹³² (10 verses); (17) adṛśyakaraṇa⁹³³ (42 verses); (18) pādukāsādhana⁹³⁴ (15 verses); (19) kālavañcana (28 verses); (20) sarvasamkhyāsādhana (69 verses).⁹³⁵

Of some interest with regard to medicine are two parts of chapter eleven which deal with procedures bringing about disease in adversaries (among the disorders mentioned are lūtā, a type of ulcer, galatkuṣṭha, a form of leprosy, and pādasamkoca, a contracture of the feet), and one section of chapter nineteen which describes signs of impending death (mṛtyulakṣaṇajñāna).

The author informs us in the first chapter (6–9) that his treatise is an extract from earlier works:⁹³⁶ *Sāmbhava*,⁹³⁷ *Yāmala*, *Kauleya*, *Dāmaratantra*,⁹³⁸ *Svaccha-ndatantra*,⁹³⁹ *Kākula*,⁹⁴⁰ *Sauca*, *Rājatantra*,⁹⁴¹ *Amṛteśvaratantra*,⁹⁴² *Uḍḍiśatantra*, *Vātulantra*,⁹⁴³ *Ucchiṣṭa*,⁹⁴⁴ *Siddhiśābaratantra*,⁹⁴⁵ *Kinkinī*,⁹⁴⁶ *Merutantra*,⁹⁴⁷ *Kāka-candeśvarīmatatantra*,⁹⁴⁸ *Śākinītantra*,⁹⁴⁹ *Dākinītantra*,⁹⁵⁰ *Raudra*, *Anugrahanigraha*,⁹⁵¹ *Kautuka*, *Śalyatantra*,⁹⁵² *Kriyākālaguṇottara*, *Haremekhalakagrantha*, *Indrajā-la*,⁹⁵³ *Rasārṇava*, *Ātharvaṇa*,⁹⁵⁴ *Mahāveda*,⁹⁵⁵ *Cārvāka*, and *Gāruḍatantra*.⁹⁵⁶

The *Merutantra* is referred to again in the body of the work (1.16; 8.9). Authorities mentioned are Bhānusuta (1.56, 57, 59) and Somadevaguru (1.55).

P. Cordier asserted that the *Kakṣapuṭa* quotes the *Rudrayāmala*.⁹⁵⁷

Mantras abound in the *Kakṣapuṭa*.⁹⁵⁸

The *Kakṣapuṭa* is quoted by Ṭoḍara;⁹⁵⁹ it is referred to in Śrīdāsapaṇḍita's commentary on the *Aṣṭāṅgahṛdayasaṃhitā*.⁹⁶⁰ The *Rasendramāṅgala* mentions the *Kakṣapuṭa* and may contain verses from it. Many later works contain extracts from the *Kakṣapuṭa*.⁹⁶¹

The *Kakṣapuṭa* is closely related to the Mantrakhaṇḍa of Nityanātha's *Rasaratnā-kara*.⁹⁶²

The author and his date

The date of Siddha Nāgārjuna, whose name does not occur in the body of the work,⁹⁶³ has been discussed elsewhere.⁹⁶⁴ Since the *Kākakandeśvarīmatatantra*, one of the sources of the *Kakṣapuṭa*, refers to (Siddha) Nāgārjuna as an ancient authority, this *Kakṣapuṭa* cannot possibly have been composed by the latter. The text is later than the twelfth century, the period to which the *Kākakandeśvarīmatatantra* is usually assigned and earlier than Ṭoḍara's *Āyurvedasaukhya*, which quotes it.⁹⁶⁵

The *Yogaratnamālā* by Nāgārjuna

The *Yogaratnamālā*⁹⁶⁶ or *Āścaryaratnamālā*,⁹⁶⁷ ascribed to Nāgārjuna,⁹⁶⁸ is of some medical interest, though it is chiefly a Tantric text dealing with magic.

*Contents*⁹⁶⁹

The treatise consists of 140 polished verses⁹⁷⁰ in āryā metre⁹⁷¹ about a large number of subjects⁹⁷² belonging to what is called *ṣaṭkarman* in Tantrism. Most of the stanzas describe procedures enabling one to achieve extraordinary aims, but the healing of bodily disorders also forms an integral part of the work.

Some of the topics are: *vaśya* (subjugation; 3–6); *vidveṣaṇa* (sowing dissension; 7–10); *uccātaṇa* (eradication; 11–14); *puruṣāntardhāna* (rendering oneself invisible; 25–30); *kautūhala* (the production of unusual phenomena; 31–38); *agnistambha* (the quenching of fire; 39–42); *śaṣtrastambha* (making weapons harmless; 55–58); *akālagrahaṇa* (causing solar and lunar eclipses; 63–67); *mṛtasamjīvana* (making dead animals alive again; 135), etc. Subjects pertaining more or less to medicine are: *lomaśātana* (the removal of hair; 51–54); *viṣāpahāra* (counteracting poisons; 73–76); *viṣamajvarāpahāra* (counteracting irregular fever; 77–78); *vandhyāputrajanana* (making a barren woman give birth to a son; 85–86); *vandhyākaraṇa* (producing sterility in a woman; 89–92); *liṅgavṛddhi* (increasing the size of the male organ; 93–96); *śukrastambha* (delaying ejaculation; 97–100); *yonīśūlakaraṇa* (causing pain in the female organs; 101); *kuṣṭhakaraṇa* (causing *kuṣṭha* to appear; 102);⁹⁷³ *garbhastambha* (preventing delivery in a pregnant woman; 106); *vṛścikaviṣāpahāra* (counteracting the effects of a scorpion-bite; 108–111); *bhagasamkocana* (healing wounds of the female organs; 121); *bhagodghāṭana* (making the vagina accessible or inaccessible to the male; 122); *bhagapravāha* (causing bleeding from the female organs; 123).

Some of the recipes bear names, e.g., *kalpalalanā* (26) and *reṇurāja* (121).

At the end of the work the author, who calls himself *Nāgārjuna*,⁹⁷⁴ declares that he composed it from what he heard from his guru and learnt from other *śāstras*. He adds that he tested all the recipes and found them effective.⁹⁷⁵

Special features

Noteworthy names of medicinal plants are: *āhaka* (62),⁹⁷⁶ *mātulānī* (69),⁹⁷⁷ *śaśāṅka* (23),⁹⁷⁸ *śaśīja* (39),⁹⁷⁹ *stabdhā* (34),⁹⁸⁰ and *śūla* (96).⁹⁸¹

The author and his date

The name of the author's guru, *Bhāskara*, may be hidden in a pun in the first verse, where he is compared to the sun (*bhāskara*). P.V. Sharma, who accepts this interpretation,⁹⁸² regards him as identical with the *Bhāskara* who was the father and teacher of *Sodhala*⁹⁸³ and also the teacher of *Keśava*, which makes the *Nāgārjuna* who wrote the work a contemporary of these two (twelfth to thirteenth centuries)⁹⁸⁴ and distinct from *Siddha Nāgārjuna*.⁹⁸⁵ Since *Guṇākara* wrote his commentary on the *Yogaratanmālā* in 1239/40, the work is earlier than that date.

Commentary

A commentary (*vivṛti*)⁹⁸⁶ on *Nāgārjuna's Yogaratnamālā* was written by *Guṇākara*,⁹⁸⁷ a *Śvetāmbara* monk, who made use of more elaborate works of predecessors, as indicated by himself.⁹⁸⁸ The commentary was composed in 1239/40.⁹⁸⁹ The only sources referred to are a *Kośa* (ad 12), a *Dravyaguṇa* (ad 44), and a *Paryāya* (ad 35).

Local names of medicinal plants found in it are: *bariārā* (ad 85; = *balā*), *bhelā* (ad 63; = *bhallātakabīja*), *boḍatharī* (ad 111; = *stabdhā*), *boḍī kahlārī* (ad 34; = *stabdhā* = *śrāvaṇikā* = *muṇḍī*), *gojibhī* (ad 78; = *nāginī* = *govatsā*),⁹⁹⁰ *iṅguvā* (ad 26; = *iṅgudī*),⁹⁹¹ *jethīmadhu* (ad 85; = *madhuyaṣṭi*), *kakahī* (ad 59; = *hrībīja* = *bālakabīja*),⁹⁹² *kākahī* (ad 85; = *atibalā*),⁹⁹³ *karihārī* (ad 12 and 23; = *halinī* = *lāṅgalī*),⁹⁹⁴ *thoharī* (ad 76 and 100; = *vajrī* = *snuhī*).⁹⁹⁵ Other words of local origin are: *suramā* and *rasavatā* (ad 23 and 29; = *sroto'ñjana*), *aṇasālā*, the word for *bhūnāga* (an earthworm) in *Saurāṣṭra*, and *kecuvā*, the word used for that animal in *Kānyakubja*. As most of these words are said to be current in *Gujarāt*, the commentator may have resided in that region for a long time.⁹⁹⁶

A *Guṇākara* is quoted by *Gopālādāsa*,⁹⁹⁷ *Nāganātha*,⁹⁹⁸ *Niścalakara*,⁹⁹⁹ *Vācaspati*,¹⁰⁰⁰ and *Vijayarakṣita*.¹⁰⁰¹ The quotations by *Niścalakara* and *Vijayarakṣita* cannot be traced in the commentary on the *Yogaratanmālā* and may derive from a commentary on the *Carakasamhitā*¹⁰⁰² by a *Guṇākara* who evidently was a different person, since he lived a long time before his namesake.¹⁰⁰³

The Śīsurakṣāratna by Prthvīmalla

The *Śīsurakṣāratna*,¹⁰⁰⁴ also called *Bālacikitsā*,¹⁰⁰⁵ is a work by *Prthvīmalla*, the elder brother of *Māndhātara* and son of *Madanapāla*.

Contents

The *Śīsurakṣāratna* is a treatise on *kaumārabhr̥tya* in three chapters (*prakāśa*): (1) *garbhīṇīgarbharakṣānirūpaṇa*, on prenatal care, especially on rituals to be observed during each month of pregnancy; (2) *bālakarakṣānirūpaṇa*, chiefly on *bālagrahas* and the contrivances for averting their attacks; (3) *vaidyakoktauśadhānirūpaṇa*, on children's diseases and their treatment.

Sources, mentioned in the introduction, are the *Prayogasāra*¹⁰⁰⁶ and *Suśruta*. The *Bhaviṣyottara* is referred to at the beginning of chapter one. Chapter two indicates that the author borrowed from the *Kriyākālaguṇottara*, *Nārāyaṇīya* and *Prayogasāra*. Chapter three contains the *Śītalāṣṭaka* from the *Skandapurāṇa*.

Prthvīmalla and his work are quoted in the *Paraśurāmapratāpa*, a work belonging to the sixteenth century.¹⁰⁰⁷

Special features

The order of the diseases in chapter three is not in conformity with the *Mādhavanidāna*; moreover, *antravṛddhi*, *kuraṇḍa* and *vradhma* are regarded as three separate nosological entities.¹⁰⁰⁸

The author and his date

The genealogy of *Prthvīmalla* is recorded in the introductory verses.¹⁰⁰⁹

Prthvīmalla's father, *Madanapāla*, wrote his *Madanavinoda* in 1375, which implies that the *Śīsurakṣāratna* can be assigned to the beginning of the fifteenth century.¹⁰¹⁰

Puruṣottama

Puruṣottama, son of Mādhava, grandson of Cakradatta, great-grandson of Śrīkaṇṭhadatta, wrote *Dravyaguṇa*.

Puruṣottama states that his great-grandfather was the author of the second part of the *Madhukośa* and of the *Vyākhyākusumāvalī*, which establishes that he lived about A.D. 1200.¹⁰¹¹

Raṇakakesarin

Raṇakakesarin was the author of a *Rugṇadīpikā* or *Yogadīpikā*.¹⁰¹²

The *Ratnakutūhala*

The anonymous *Ratnakutūhala* was composed in 1442.¹⁰¹³

Śārṅgadhara

The *Śārṅgadharasamhitā* by Śārṅgadhara¹⁰¹⁴ has an important place in Sanskrit medical literature of the mediaeval period and became a popular work, which can be inferred from its inclusion in the minor triad of authoritative works called *Laghutrayī*.¹⁰¹⁵ The changes in the theory and practice of Indian medicine since the days of the early *saṃhitās* are faithfully reflected in it, especially the increasing influence of alchemy, while moreover the examination of the pulse is described for the first time in this treatise.

Contents

The work consists of 2,421 verses arranged in three sections (*khaṇḍa*) and thirty-two chapters, though the author himself states¹⁰¹⁶ that it contains 2,600 verses in thirty-two chapters. The first section (*pūrvakhaṇḍa*) has 453 verses in seven chapters, the second (*madhyamakhaṇḍa*) 1,284½ verses in twelve, and the third (*uttarakhaṇḍa*) 683½ verses in thirteen chapters. Part of the colophons, especially those of Kāśīrāma's commentary, also use the terms *sūtrasthāna*,¹⁰¹⁷ *śārīrasthāna*¹⁰¹⁸ and *cikitsāsthāna*,¹⁰¹⁹ in agreement with the work being a *saṃhitā*.¹⁰²⁰ A short table of contents is found in the first chapter.¹⁰²¹

I. *Pūrvakhaṇḍa*. (1) The *paribhāṣā* chapter deals with some basic concepts (3–5), the contents of the work (7–13ab), weights and measures (14cd–44ab), basic rules regarding the preparation of medicines, the time of collection of fresh drugs and the parts of the plants to be used (44cd–62ab).¹⁰²² (2) The *bhaiṣajyākhyānaka* chapter describes the five times of the day at which medicines should be taken (1–12), the concepts of *rasa*, *guṇa*, *vīrya*, *vipāka* and *prabhāva* (13–24ab), the relations between the *doṣas* and the seasons (24cd–30ab), and various causes of disequilibrium of the *doṣas* (30cd–36ab). (3) The *nāḍīparīkṣādividhi* chapter is about the examination of the pulse (1–9ab) and on prognostic signs (9cd–26).¹⁰²³ (4) The *dīpanapācana* chapter contains definitions of a series of terms designating drug actions.¹⁰²⁴ (5) The *kalādikākhyāna* chap-

ter is about anatomy,¹⁰²⁵ it describes a series of bodily structures, beginning with the seven *kalās* (1–7ab), and proceeds with the seven receptacles (*āśaya*; 7cd–10), seven *dhātus* (11–12), *malas* (13–15), *upadhātus* (16–18), seven layers of the skin (19–22), *doṣas* (23–36ab), *snāyus* and related structures (36cd–38ab), *śīrās* (38cd–39ab), *peśīs* (39cd–40ab), *randhras* (40cd–42), *phupphusa* and other viscera (43–45ab), the male genitals and the heart (45cd–47ab), and some more general subjects like respiration (48cd–50ab), *āyus* (50cd–51), etc. The chapter ends with verses on the evolution of the universe (*śṣṭīkrama*) according to Sāṃkhya views (55–73). (6) The *āhārādīgati* chapter is concerned with physiology (1–14ab), rules for the administration of medicines to children and related matter (14cd–20), the constitutions (21–24ab), and finally the characteristics of *nidrā*, *mūrchā*, *bhrānti*, *tandrā*, *glāni*, *ālasya*, *jṛmbhā*, *kṣūta* and *udgāra* (24cd–29ab). (7) The *rogagaṇanā* chapter enumerates the diseases recognized by Śārṅgadhara and their several types (1–204).

II. The *Madhyamakhaṇḍa* deals with the various pharmaceutical preparations and contains a great number of formulae. (1) The *svarasādikalpanā* chapter defines a *svarasa*, describes the way it should be prepared, and gives many examples (2–20). It proceeds in the same way with the variety of *svarasa* prepared by means of *puṭapāka* (21–43ab).¹⁰²⁶ (2) The first part of this *kvāthādikalpanā* chapter (1–149) is on *kvāthas*;¹⁰²⁷ it also enumerates the drugs belonging to two *gaṇas*, namely the *vīratarvādiṇa* (102cd–104ab) and the *varuṇādiṇa* (128–129). The second part deals with the preparations called *pramathā* (150–151), *yavāgū* (152–153), *yūṣa* (154–156), *pāna* (157–158), *uṣṇodaka* (159–160), *kṣīrapāka* (161–164ab), *anaprakriyā* (164cd–166ab), *vilepī* (166cd–167ab), *peyā* and *yūṣa* (167cd–169ab), and *maṇḍa* (169cd–175ab). (3) The *phāṇṭādikalpanā* chapter describes the preparations called *phāṇṭa* (1–8) and *mantha* (9–13ab). (4) The *himakalpanā* chapter is about *himas* (1–9ab). (5) The *kalkakalpanā* chapter is concerned with *kalkas* (1–29ab). (6) The *cūrṇakalpanā* chapter (1–65ab) deals mainly with *cūrṇas*,¹⁰²⁸ but has also verses on *anupāna* (4–5), on some groups of drugs (16cd–19ab: *jīvanīyagaṇa*; 19cd–20: *aṣṭakavarga*) and on *kṣāra* (24–25). (7) The *guṭīkalpanā* chapter describes *guṭīkās*, *modakas* and *vaṭakas*, which are closely related types of preparation (1–105).¹⁰²⁹ (8) The *avalehakalpanā* chapter is about *avalehas* (1–89ab).¹⁰³⁰ (9) The *ghṛtatailakalpanā* chapter is concerned with *snehapāka* (1–19ab), various types of medicated ghees (19cd–92) and oils (93–210), and also has some verses on *madhuśukta* (178cd–180). (10) The *saṃdhānakalpanā* chapter is about preparations made by way of fermentation (*saṃdhāna*), i.e., the types called *āsava* and *ariṣṭa*¹⁰³¹ (2–3), *sīdhu*, etc. (4), *surā*, etc. (5–6), *vāruṇī* (7ab), *śukta* (7cd–10), *tuṣāmbu*, *sauvīra*, *kāñjika* and *saṇḍāktī* (11–12). A number of *āsavas* (13–38)¹⁰³² and *ariṣṭas* (39–92) are described. (11) The *dhātusodhanamāraṇa* chapter describes the purification (*sodhana*) and killing (*māraṇa*) of metals and a number of other inorganic substances. After enumerating the seven metals (*dhātu*) distinguished by Śārṅgadhara, namely gold, silver, brass (*āra*), copper, lead (*nāga*), tin (*vaṅga*) and iron (*tīkṣṇa*), and describing their purification (1–4), the killing of each of these metals is dealt with (5–53ab). This is followed by a section on the seven *upadhātus*, which are mineral substances consisting of (53cd–54ab) *mākṣika* (pyrites), *tutthaka* (sulphate of copper), *abhra* (mica), *nīlāñjana* (stibnite

or antimonite, Sb_2S_3), śilā (= manahśilā, i.e., realgar, As_2S_2), ālaka (= haritāla, i.e., orpiment, As_2S_3) and rasaka (calamine, i.e., an ore of zinc). Procedures leading to the purification and killing of these substances are described (54cd–76ab), followed by the procedure aiming at the release of the essence of the metals (and upadhātus), the so-called sattvanirgama (76cd–78). The third part of this chapter is concerned with the purification and killing of some (semi)precious stones (79–92ab). It ends with the purification of bitumen (śilājatu; 92cd–99ab), the preparation of rust of iron (maṇḍūra; 99cd–101ab) and finally caustics (kṣāra; 101cd–104). (12) The rasakalpanā chapter mainly deals with mercurial preparations. It opens with a verse in praise of mercury (1), mentions its synonyms (2) and enumerates nine metals (3–4ab), i.e., the seven metals mentioned in chapter eleven, together with bell-metal (kāṁsyaka) and magnetic oxide of iron (kāntaloha). This is followed by the purification of mercury (4cd–13ab), sulphur (gandhaka; 13cd–15ab) and cinnabar (darada; 15cd–16ab), and the extraction of mercury from the last substance of these three (16cd–17). The nine poisons and seven secondary poisons are enumerated (18–20ab), and the so-called mukhakaraṇa of mercury is dealt with, which consists of procedures rendering it capable of 'eating' other substances (20cd–24); after this mukhakaraṇa it is called chinnaṇakṣa, which means that it is now regarded as a bird whose wings have been clipped. The chapter goes on with the description of gandhakajāraṇa, i.e., the digestion of sulphur by mercury (25–29ab) and various procedures for the killing of mercury (29cd–41). The remaining part of the chapter consists of recipes for a number of rasaśaukhas against various diseases (42–289).¹⁰³³ It ends with some verses on the purification of jāipāla (290) and poisons (291–294), which may be later additions because the commentators are silent on them.

III. The Uttarakhaṇḍa is about pañcakarman (chapters 1–8)¹⁰³⁴ and allied subjects (chapters 9–13). Its thirteen chapters deal with: (1) sneha (1–34ab); (2) sveda (1–35), said to be of four types: tāpa-, ūṣma-, upanāha-, and dravasveda; (3) vamaṇa (1–33); (4) virecana (1–48ab);¹⁰³⁵ (5) basti, especially the type called anuvāsana (1–51); (6) nirūha (1–34); (7) uttarabasti (1–16ab); (8) nasya and śirovirecana (1–63); (9) dhūmapāna (1–25); (10) gaṇḍūṣa and kavala (1–21ab); (11) lepa and some other subjects; this is a long chapter of 152 verses containing many prescriptions, among which are recipes for increasing the size of the penis (liṅgavṛddhi), tightening the vagina (yonisamkoca); śirobasti and karnapūraṇa are also dealt with in this chapter; (12) śoṇitasrāva, i.e., bloodletting (1–45); (13) netrakarman, i.e., the application of medicinal preparations to the eyes; this long chapter of 128 verses is concerned with seven main types of preparation applied to the eyes: seka (2–12ab), āścyotana (12cd–21ab), piṇḍi (21cd–30ab), biḍāla (30cd–37), tarpaṇa (38–52ab), puṭapāka (52cd–61), and añjana (62–74); it also contains recipes for vartis (75–87ab), and ends with those for rasaśrīyās and some añjanas (87cd–124).¹⁰³⁶

Authors and works quoting from or referring to Śārṅgadhara or his saṁhitā are: Aghoranātha's commentary on his *Bhīṣaksarvasva*, the *Amṛtasāgara* and Jñārasārma's version of this work, the *Ārogyāmrta-bindu*, Āśubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa*, Āśubodha and Nityabodha Senagupta's com-

mentary on the *Rasaratnasamuccaya*, the *Āyurvedīya Khanijavijñāna*, Basava's *Śivatattvaratnākara*, Bhāvamīśra, the *Bheṣajasaṁhitā*, Bhoja's *Yuktikalpataru*, the *Brhannighaṇṭuratanākara*, Devasimha Viṭṭhal's *Brhadāsavārīṣṭasamgraha*, the *Dhātumāraṇa*,¹⁰³⁷ Dharmadatta's *Tridoṣasamgraha*, Gaṇanāthasena's commentary on his *Siddhāntanidāna*, Gaṇeśadaivajña's commentary on the *Muhūrtatattva*,¹⁰³⁸ Govindasena's *Paribhāṣāpradīpa*, Guṇrājśarmamīśra's *Viśikhānupraveśavijñāna* and commentary on the *Āyurvedaprakāśa*, Haridattaśāstrin's commentary on the *Rasatarāṅgiṇī*, Hariprapanna's *Rasayogasāgara*, Hariśaraṇānanda's *Kūpīpakvarasanirmāṇavijñāna*, Mādhava's *Āyurvedaprakāśa*, Mahimasamudra's *Vaidyakacintāmaṇi*, Meghamuni's *Meghavinoda*,¹⁰³⁹ Nidhi's *Yogasamuccaya*, the *Pākamārtapṇa*,¹⁰⁴⁰ the *Pāradasaṁhitā*, the *Paraśurāmapratāpa*,¹⁰⁴¹ Rājeśvaradatta Mīśra's *Svasthavṛttasamuccaya*, Rāma's *Śaṅkarākhyā*, Rāmacandra's *Rāmavinoda*, the *Rasatattvavivecana*, the *Rasāyanasamgraha*,¹⁰⁴² the *Rasoddhāratāntra*, Hanumatprasāda Śarma's commentary on the *Siddhabhaiṣajyamañjūṣā*, Priyavrat Śarmā's auto-commentary on the *Āyurvedadarśana*, Śivamīśra's *Vaidyāśāstraśivānubhava*, Somadevasarma's commentary on the *Āyurvedaprakāśa*, Ṭodara's *Āyurvedasaukhyā*,¹⁰⁴³ Trimalla's *Yogatarāṅgiṇī*¹⁰⁴⁴ and *Brhadyogatarāṅgiṇī*,¹⁰⁴⁵ the *Uttanikadarpaṇa*,¹⁰⁴⁶ an anonymous *Vaidyakasaṁgraha*, Vaidyārāja's *Sukhabodha*, the *Vāsudevānubhava*,¹⁰⁴⁷ Vidyāpati's *Vaidyarahasya*, Viśvanātha Dvivedī's *Rasendrasambhava*, Yādavjī Trikamjī's *Rasāmṛta* and *Siddhayogasamgraha*, the *Yogaratanākara*,¹⁰⁴⁸ and Yogendranātha's *Āyurvijñānaratnākara*. The *Śārṅgadharaśaṁhitā* was one of the sources of Āryadāsa Kumārasiṁha's *Kvāthamaṇimālā* and of the *Ma'din al-Šifā*.

Large stretches of the *Śārṅgadharaśaṁhitā* were incorporated in Bhāvamīśra's *Bhāvaparakāśa*.¹⁰⁴⁹ Vedakavi made use of it in the composition of his *Jivānanda*. Many verses from *Śārṅgadharaśaṁhitā* I.5 and 7 form part of the *Nāḍīcakra*. The unknown author of the interpolated portions of Niścalakara's *Ratnaprabhā* reproduces parts of the *Śārṅgadharaśaṁhitā* and Āḍhamalla's commentary.¹⁰⁵⁰

Śārṅgadhara was also known to Rāma, who quotes him in his *Tīlakā* on the *Rāmāyaṇa*.¹⁰⁵¹

Rāmacandra's *Vaidyavinoda*, written in Hindī verse in 1669/70, is an adaptation of the *Śārṅgadharaśaṁhitā*.¹⁰⁵²

Special features¹⁰⁵³

The series of the seasons consists of grīṣma, prāvṛṣ, varṣāḥ, śarad, hemanta, vasanta; they are associated with the signs of the zodiac (rāśi): grīṣma with Meṣa (Aries) and Vṛṣa (Taurus), prāvṛṣ with Mithuna (Gemini) and Karka (Cancer), varṣāḥ with Siṁha (Leo) and Kanyā (Virgo), śarad with Tulā (Libra) and Vṛścika (Scorpio), hemanta with Dhanu (Sagittarius) and Grāha (Capricornus), vasanta with Kumbha (Aquarius) and Mīna (Pisces) (2.25cd–26). Medicinal substances are said to possess only five main qualities (guṇa), namely guru, snigdha, tīkṣṇa, rūkṣa and laghu, corresponding with the five mahābhūtas; all the other qualities are included in these five (I.2.16–17ab).¹⁰⁵⁴ Two types of vīrya are distinguished, uṣṇa and śīta; the other types are included in these two (I.2.17cd–18).¹⁰⁵⁵

The *Śārṅgadharaśaṁhitā* is the earliest Sanskrit medical text that summarily de-

scribes feeling the pulse for diagnostic and prognostic purposes (I.3.1–9ab).¹⁰⁵⁶ The types of pulse found in disturbances of the doṣas are characterized by comparing them with the way of moving of certain animals. Some signs of prognostic significance are enumerated and the types of pulse occurring in a number of diseased conditions, as contrasted with those in health, are also described.¹⁰⁵⁷

Pulse-examination had no place in Indian medicine in early periods, as is evident from the texts and attested by an important witness like I-ching,¹⁰⁵⁸ but is rarely omitted from medical treatises which are later than Śārṅgadhara.¹⁰⁵⁹ Investigations on the origin of the āyurvedic pulse-lore are wanting, though it has been suggested¹⁰⁶⁰ that it derives from Muslim medicine. Influences from Southern India should, however, not be neglected, because Siddha medicine has a highly developed and almost purely Tamil terminology for a large number of pulses.¹⁰⁶¹

Inauspicious and auspicious dreams are also dealt with in chapter three (I.3.14cd–26).

The actions of drugs defined in chapter four, and illustrated with examples, are: dīpana, pācana, śamana, anulomana, sraṁsana, bhedana, recana, vamaṇa, śodhana, chedana, lekhaṇa, grāhin, stambhana, rasāyana, vājīkaraṇa, śukrala, śukrapravartaka and -janaka, sūkṣma, vyavāyin, vikāśin, madakārin, prāṇahara, pramāthin, and abhiśyandin.

The chapter on anatomy (I.5) presents a number of noteworthy features. The organ, usually designated as kloman and regarded as the seat of thirst, is called tila¹⁰⁶² by Śārṅgadhara (I.5.8 and 45) and said to be located on the left side of the abdomen, above the seat of the digestive fire, though it is described as being present on the right side under the liver in earlier texts.¹⁰⁶³ Among the seven receptacles (āśaya) the chest (uras) is designated as the receptacle of living blood (jīvarakta; I.5.9), which is new. Vāta is said to be predominantly associated with rajas (I.5.26), pitta with sattva (I.5.29), kapha with tamas (I.5.33cd–34ab). The transformation of rasa into blood is said to take place in the liver (I.5.31); elsewhere (I.6.9), Śārṅgadhara asserts that this process occurs in the heart.¹⁰⁶⁴ A tenth orifice (randhra) of the body has been added to the traditional number of nine; it was interpreted as the hidden brahmarandhra on the top of the head by Āḍhamalla (ad I.5.41). The process of respiration has been described for the first time by Śārṅgadhara: “The prāṇavāyu, located in the umbilical region, touches the interior of the heart-lotus and then leaves (the body) by way of the throat, in order to drink the amṛta of Viṣṇu’s place (i.e., the atmosphere). After drinking the nectar (pī-yūṣa) of the atmosphere, it returns quickly, satisfying the whole body and nourishing the abdominal fire” (I.5.48cd–50ab).¹⁰⁶⁵

The verses on Sāṃkhyā mention the five tanmātras (I.5.61cd–65ab).

Blood is described as present in the whole body and as the main support of life (I.6.10cd). Its qualities are snigdha, guru, cala and svādu; when vidagdha, it is like pitta (I.6.11ab).¹⁰⁶⁶

Śārṅgadhara’s nosography (I.7) differs from the systems found in the *Mādhavanidāna* and Vāgbhāṭa’s works. As shown by the following survey, it has many features of its own, although the influences of Vāgbhāṭa and Mādhava are clearly perceptible.

Śārṅgadhara enumerates twenty-five varieties of fever, whereas Mādhava distin-

guishes eight of them. This number of twenty-five is obtained by counting separately the five irregular fevers (viṣamajvara), which Mādhava considers to be included in saṃnipātajvara, and by subdividing Mādhava’s āgantujvara into thirteen varieties. The latter group consists of (a) fevers caused by abhicāra, grahāveśa and śāpa, (b) four traumatic (ghātaja) fevers, brought about by śrama, cheda, kṣata, and dāha, (c) six abhiśaṅga fevers, arising from kāma, bhīti, śuc, roṣa, viṣa, and auśadhagandha. The majority of these varieties are also found in the *Mādhavanidāna*, but the four members of the ghātaja group are absent there. A closely related classification of the āgantujvaras occurs, however, in Vāgbhāṭa’s works, which were obviously Śārṅgadhara’s source of inspiration. The fevers called caturthakaviparyaya, vātabalāsaka and pralepaka, described by Mādhava, are not mentioned. Seven types of diarrhoea (atisāra) are listed, instead of the six of Mādhava; a variety caused by fear (bhaya), also recognized as a separate entity in the *Carakasamhitā* and in Vāgbhāṭa’s works, has been added. A fifth type of grahaṇī, brought about by āma, is added to the four doṣaja types of Mādhava; according to the commentator Āḍhamalla, it is caused by ānavāta, while Kāśīrāma mentions āma. This suggests that it may be identical with saṃgrahagrahaṇī, described in some supplementary verses of the *Mādhavanidāna*.¹⁰⁶⁷ Ajīrna is divided into four varieties, whereas Mādhava mentions that some authorities recognize six types; Śārṅgadhara’s fourth type, called viśājīrna, unknown under that name in earlier treatises, may be closely related to the rasaśeṣa form of ajīrna, recognized by Mādhava in agreement with the *Suśrutasamhitā*. Three doṣaja types of alasa are said to exist, which are unknown in the classical saṃhitās and the *Mādhavanidāna*, where this disorder is regarded as one single entity. Daṇḍakālasaka is said to be related to vilambikā, although being a separate entity; this disorder, mentioned in the classical saṃhitās, is not described in the *Mādhavanidāna*.¹⁰⁶⁸ The classification of haemorrhoids (arśāṃsi) differs slightly from that of Suśruta and Mādhava, but agrees with that of Vāgbhāṭa. The group of twenty kinds of parasites (kṛmi)¹⁰⁶⁹ is expanded by the addition of snāyuka (dracontiasis), described for the first time in Vṛnda’s *Siddhayoga*, and by the description of worms living in ulcers. Kṣaya (i.e., rājayakṣman) is divided into five types, according to whether it is caused by one of the three doṣas, by all three together, or by uraḥkṣata; the last type of this series is absent from Vāgbhāṭa’s works; uraḥkṣata is a separate disorder in the *Mādhavanidāna*; it is not described as such by Śārṅgadhara. Six causes of śoṣa are listed instead of the seven of the *Suśrutasamhitā* and the *Mādhavanidāna*; śoṣa brought about by uraḥkṣata is absent. The group of disorders of the digestive fire (agnivīkāra) has been increased by the addition of bhasmaka, not yet mentioned in the *Bṛhatrayī* and the *Mādhavanidāna*.¹⁰⁷⁰ Seven types of vomiting (chardi) are mentioned, whereas Caraka, Suśruta, Vāgbhāṭa and Mādhava refer to only five types; Śārṅgadhara’s sixth (caused by ghṛṇā, disgust) and seventh types (caused by pregnancy) are, however, included in the fifth one (the āgantū type) of the other treatises.

Thirst (trṣṇā) is of six types, as distinct from the five of Caraka and the seven of Suśruta and Mādhava, but in general agreement with Vāgbhāṭa. The varieties of mūrchā are the same as those distinguished by Caraka and Vāgbhāṭa, whereas Suśruta and Mādhava prefer a different classification. Śārṅgadhara follows Mādhava in mentioning bhrama, nidrā, tandrā and saṃnyāsa after mūrchā; he deviates from Mādhava

by including glāni in this group of related disorders, as does Suśruta. Seven types of mada are enumerated, the same as those of Caraka and Vāgbhaṭa; mada is not a separate disease in the *Mādhavanidāna*, where it is referred to in the chapters on madātyaya and unmāda. Twenty varieties of bhūtonmāda are distinguished¹⁰⁷¹ versus seven in the *Carakasamhitā*, nine in the *Suśrutasamhitā* and *Mādhavanidāna*, and eighteen in Vāgbhaṭa's works; Śārṅgadhara's classification is related to that of Vāgbhaṭa. Four types of āmavāta are recognized; the dvandvaja varieties of Mādhava are omitted. Eight types of pariṇāmaśūla are enumerated, in contrast with the seven of the *Mādhavanidāna*; Śārṅgadhara adds an eighth type, called jaratpittabhavaśūla.¹⁰⁷² The two varieties of ānāha are the same as those of Suśruta and Mādhava, but the one originating from the āmāśaya is called pratyānāha, a term that may occur here for the first time. A disease recognized by Śārṅgadhara, but rarely occurring in earlier texts and absent from the *Mādhavanidāna*, is urograha.¹⁰⁷³ Eight varieties of gulma are enumerated, in agreement with Vāgbhaṭa, whereas Mādhava has only five of them. The disease called somaroga, appearing for the first time in Vaṅgasena's *Cikitsāsārasaṃgraha*, is accepted by Śārṅgadhara; it is said to be of one type; the variety called mūtrātisāra is absent.¹⁰⁷⁴ A new nosological entity, distinct from vṛddhi and its varieties, may be āṇḍavṛddhi, a disorder usually known as kuraṇḍa in later treatises.¹⁰⁷⁵

Apaci is not mentioned, probably because it was regarded as a variety of gaṇḍamālā, or even identical with it, as in Vāgbhaṭa's works.¹⁰⁷⁶ The disease commonly known as galagaṇḍa, but called gaṇḍālajī by Śārṅgadhara, is said to be of one type, whereas Suśruta and Mādhava distinguish three varieties. Four types of granthi are added to the five of Suśruta and Mādhava, namely those originating from blood, muscular tissue, bony tissue, and ulcers; the same extra varieties, with the exception of that originating from bony tissue, are also described by Vāgbhaṭa. The eight types of sadyovraṇa agree with those of Vāgbhaṭa. Two types of koṣṭhabheda are mentioned, chinnānta and niḥsṛtāntaka.¹⁰⁷⁷ Bone fractures are divided into eight varieties in a manner that differs from that of Suśruta and Mādhava. Four types of burns are mentioned; Suśruta describes the same four types, which are absent from the *Mādhavanidāna*. Eight forms of bhagandara are distinguished: rju, parikṣepin and arśoja are added to the five of Suśruta, just as in Vāgbhaṭa's works.

The group of śūkadoṣas, which consists of eighteen varieties in the *Suśrutasamhitā* and *Mādhavanidāna*, has been expanded with six disorders: liṅgārśas, nivṛtta, avapāṭikā, niruddhaprakāśa, and parivartikā; this arrangement resembles that of Vāgbhaṭa, who adds nivṛtta, avapāṭikā and niruddhamāṇi. Mādhava describes liṅgārśas in the chapter on upadaṃśa, but avapāṭikā, niruddhaprakāśa (the same as niruddhaprakāśa and niruddhamāṇi) and parivartikā in the chapter on kṣudrarogas.

Śārṅgadhara's enumeration of sixty kṣudrarogas differs from the arrangement found in other treatises. Additions, in comparison with the *Mādhavanidāna*, are: koṭha,¹⁰⁷⁸ rājikā,¹⁰⁷⁹ and rakasā;¹⁰⁸⁰ these disorders are also regarded as kṣudrarogas by Vāgbhaṭa. Mādhava's eight types of visphoṭa and fourteen varieties of masūrīkā, described in separate chapters of his *Nidāna*, form part of Śārṅgadhara's kṣudrarogas, in agreement with Vāgbhaṭa again. Eleven kṣudrarogas from Mādhava's list, which comprises a total of forty-two, are absent from Śārṅgadhara's series, namely ajaga-

llikā, arūṃṣikā, avapāṭikā, dāruṇaka, indralupta, niruddhaprakāśa, nyaccha, pādadarī, palita, and parivartikā. Some of these disorders are classified differently, for example among the śūkadoṣas, bālarogas and kapālarogas. Mādhava's śūkaradaṃṣṭraka, a kṣudraroga not described in earlier works, has been accepted by Śārṅgadhara.¹⁰⁸¹ One variety of visarpa, the one caused by agnidāha, has been added to the eight of Mādhava. The disease called śleṣmapitta, described in a verse probably added later to Mādhava's chapter on amlapitta, is not mentioned.

Śārṅgadhara lists eighty types of vātaroga, forty of pittaroga, and twenty of kapharoga, related to those mentioned in the *Carakasamhitā*,¹⁰⁸² but without being identical.¹⁰⁸³ A list of ten raktarogas, completely different from that found in the *Carakasamhitā*,¹⁰⁸⁴ forms also part of Śārṅgadhara's nosological system; these ten diseases caused by blood are: gaurava (a feeling of heaviness), raktamaṇḍalatā (the appearance of round, red patches on the skin), raktanetratva (red eyes), raktamūtrātā (red-coloured urine), raktaniṣṭhivana (spitting of blood), raktapiḍakādarśana (the appearance of red boils), auṣṇya (a feeling of heat), piḍā (pain), and pāka (inflammation or suppuration).

The diseases of mouth and throat (mukharoga) are seventy-four in number and arranged in the same manner as in Vāgbhaṭa's works, with one particularity, namely the omission of gaṇḍālajī, mentioned separately by Śārṅgadhara. The diseases of the ears (karṇaroga) comprise thirty disorders, the same twenty-five as distinguished by Vāgbhaṭa, and five extra ones, located at the base of the ear (karṇamūla). These five, arising from vāta, pitta, kapha, saṃnipāta and rakta, are not included in the group of karṇarogas in earlier works. Śārṅgadhara's ten diseases of the head (śīroroga) are the same as those of Vāgbhaṭa. He also follows Vāgbhaṭa in enumerating nine diseases of the scalp (kapālaroga): upaśīrṣaka, arūṃṣikā, vidradhi, dāruṇa, piḍikā, arbuda, indralupta, khalatī, and palita. Mādhava regards six among these as belonging to the kṣudrarogas, does not describe upaśīrṣaka, and considers indralupta and khalatī to be synonyms. The eye diseases (netraroga) are the same again as those recognized by Vāgbhaṭa; their number is ninety-four.

The five pumstvarogas (sexual perversions) and eight śukradoṣas have been borrowed from the *Suśrutasamhitā*. The women's diseases (strīroga) consist of eight ārtavadoṣas, borrowed from Suśruta, and the usual four varieties of pradara. The twenty yonirogas of Śārṅgadhara are composed of a mixture of the disorders of this name recognized by his predecessors. The group of eight garbharogas differs from similar groups in earlier treatises and consists of upaviṣṭakagarbha, nāgodara, makkalla, mūḍhagarbha, viṣkambha, gūḍhagarbhaka, jarāyudoṣa, and garbhapāta; two disorders described by Mādhava, yonisamvaraṇa and saṅga, are absent. The three strīdoṣas, caused by circumstances which make women suffer mentally, form an interesting group, consisting of afflictions induced by an awkward (adakṣa) husband, a female rival (sapatnī), and fate (e.g., widowhood).¹⁰⁸⁵

The group of children's diseases (bālaroga) comprises twenty-two disorders, a larger number than found elsewhere; new members of this group are gudapāka (inflammation of the anal region)¹⁰⁸⁶ and śayyāmūtra (enuresis nocturna).¹⁰⁸⁷ Four types of bālagraha were added by Śārṅgadhara to the usual number of eight, namely

Skanda,¹⁰⁸⁸ Viśākha,¹⁰⁸⁹ Pitrgraha and Śuṣkarevatī; the name of the demon (graha), usually called Skandāpasmāra, is Svagraha in the *Śārṅgadharasamhitā*.¹⁰⁹⁰

A new group of disorders is formed by the forty-two diseases of the feet (pādaroga), the members of which are not enumerated separately, having already been mentioned under various headings; vātarakta, ślīpada and some kṣudrarogas belong to this group, according to the commentator Āḍhamalla. Śārṅgadharā distinguishes moreover fifteen complications (upadrava) of pañcakarman, and eighteen brought about by the injudicious application of sneha, sveda, dhūma, gaṇḍūṣa, añjana, and tarpaṇa. Four kinds of upadrava are caused by heat, cold, śālya, and caustics (kṣāra).¹⁰⁹¹ Śārṅgadharā also mentions disorders originating in the three types of poison, the seven metals (dhātu), seven upadhātus, and seven upaviṣas; this list is completed by disorders brought about by poisonous substances in polluted water and on weapons besmeared with a poison. Itching caused by kapikacchū,¹⁰⁹² polluted water and sūraṇa¹⁰⁹³ is also referred to, as well as swelling caused by bhallāta.¹⁰⁹⁴ The last disorder mentioned is mada, which consists of four varieties, effected respectively by pūga,¹⁰⁹⁵ bhaṅgā,¹⁰⁹⁶ akṣa¹⁰⁹⁷ and kodrava,¹⁰⁹⁸ along with other ones induced by the ingestion of various noxious vegetable substances.

The particularities of Śārṅgadharā's nosological system show that his arrangement of the diseases owes much to Mādhava, but that he chose Vāgbhaṭa as his main guide with respect to the subdivision of nosological entities. Neither Mādhava nor Vāgbhaṭa were followed blindly. Minor deviations from Mādhava's order are rather common,¹⁰⁹⁹ as are subdivisions which disagree with those of Vāgbhaṭa. Noteworthy features of Śārṅgadharā's nosology consist of additions and omissions when compared with the schemes of Caraka, Suśruta, Vāgbhaṭa and Mādhava. Additions are snāyuka, bhasma-ka, two types of bhūtonmāda, jaratpittabhavaśūla, urograha, somaroga, aṇḍavṛddhi, visarpa caused by agnidāha, the five varieties of karmāmūlaroga, the three types of strī-doṣa, śāyāmūtra, and four types of bālagraha.

Śārṅgadharā's arrangement of the diseases was rarely adopted by later authors, but did not fall into complete oblivion, since its influence is detectable in Vedakavi's *Jīvānanda*.

Other special features of the *Śārṅgadharasamhitā* are the following. Two gaṇas, the members of which are enumerated by Śārṅgadharā, namely the vīratarvādigāṇa (II.2.102cd–104ab) and varuṇādigāṇa (II.2.128–129), are modifications of gaṇas of the same name found in Suśruta (Sū.38.10 and 12). Drugs having an effect on male sexual functioning are classified in seven groups: vājīkaraṇa, śukrala, śukrapravartaka and -janaka, śukrapravartana, śukrarecana, śukrastambhaka, and śukraśoṣaṇa (I.4. 14cd–18ab).

New drugs introduced by Śārṅgadharā are: eḷīya (II.12.56);¹¹⁰⁰ kuthāra (II.11.45), also called kuthāracchinnā (II.11.47; 12.279);¹¹⁰¹ jvālāmukhī (II.11.14; 12.42, 57, 87);¹¹⁰² pātālagaruḍī (II.11.44);¹¹⁰³ rudantī (I.4.14);¹¹⁰⁴ sthūlababbūlikā (II.1.12).¹¹⁰⁵ Vegetable substances that had recently been incorporated in the āyurvedic pharmacopoeia are repeatedly prescribed, such as ākārakarabha (II.6.162; 12.56), also called ākallaka (II.10.23), and opium (ahipheṇa; I.4.20; II.6.163; 12.20 and 230). Preparations from poisonous plants like dhattūra (II.12.135 and 191; III.11.130; = dhūrta:

II.12.114; = unmatta: II.12.196), vatsanābha (II.12.117), and viṣamuṣṭi (II.12.196) are not uncommon. *Cannabis* (bhaṅgā, vijayā) rather often occurs in prescriptions (I.4.20; 7.203; II.6.72; 12.256).¹¹⁰⁶ Some new uses of single and compound drugs are mentioned by Śārṅgadharā.¹¹⁰⁷ A therapeutic technique, already described in the *Carakasamhitā* (Ci.23.66) and consisting of the rubbing of drugs into an artificial wound on the head, has been adopted and developed by Śārṅgadharā; he employs this type of treatment in cases of saṃnipāta and snake-bite (II.12.121–127ab), as well as in several vāta diseases (III.11.101cd–102).

The purification and killing of metals, minerals and gems, as well as the processing of mercury for internal use, is elaborately described by Śārṅgadharā, whose *saṃhitā* is the earliest medical treatise presenting a detailed account of these techniques. Metallic and mercurial preparations figure more prominently in Śārṅgadharā's work than in those preceding it. The number of metals (dhātu) was increased to seven by Śārṅgadharā (II.11.1) in order to make them agree with the seven tissues of the body (also called dhātu), though, in addition, a number of nine metals, becoming current later and brought into relation with the nine planets,¹¹⁰⁸ is already met with in his *saṃhitā* (II.12.3–4ab). The traditions connected with the Siddhas were known to Śārṅgadharā (II.12.158).

The author

No particulars on the author of the *Śārṅgadharasamhitā* are known, apart from his name, mentioned in one of the introductory verses (I.1.2) and at the end of the work (III.13.127). The colophons usually call him the son of Dāmodara. The māṅgalācaraṇa and some other verses¹¹⁰⁹ show him to be a Śaiva.

It has frequently been assumed,¹¹¹⁰ on insufficient grounds,¹¹¹¹ that the authors of *Śārṅgadharasamhitā* and *Śārṅgadharapaddhati*¹¹¹² are one and the same person.¹¹¹³ This identity has rightly been disputed by P.V. Sharma¹¹¹⁴ and Atrideva,¹¹¹⁵ who both stressed that the two works are very dissimilar and that the elaborate genealogy of the author, found in the *Paddhati*,¹¹¹⁶ is absent from the *saṃhitā*.

Moreover, the author of the *Paddhati* nowhere refers to himself as a medical expert, nor displays his knowledge of medicine.¹¹¹⁷

Atrideva adduced some examples of subjects, dealt with in the *Paddhati*, which are not treated in the *saṃhitā*, but might well have been present there if both works had been written by one author, such as the tempering of steel and a recipe for turning grey hair black again. These arguments, taken together, certainly justify the view that *Paddhati* and *saṃhitā* were written by two different authors.

This conclusion is sometimes thought to be confirmed by two chronological considerations,¹¹¹⁸ namely the supposed existence of a commentary on the *Śārṅgadharasamhitā* by Vopadeva, who lived in the second half of the thirteenth century, and a quotation from the *saṃhitā* by Hemādri, who was a junior contemporary and a friend of Vopadeva. Since the *Śārṅgadharapaddhati* has been compiled in A.D. 1363,¹¹¹⁹ its author lived considerably later than the Śārṅgadharā who wrote the *saṃhitā*, if credit is given to the considerations just mentioned. As I shall point out in the section on the date of the *Śārṅgadharasamhitā*, the commentary of Vopadeva

and Hemādri's quotation can be left out of consideration in this context, which does not affect the conclusion that *saṃhitā* and *Paddhati* were composed by two different authors, but has its consequences for the chronological position of the *saṃhitā*.

P.V. Sharma suggested¹¹²⁰ that the author of the *Śārṅgadharasaṃhitā* might be the same as Śārṅgadeva, who wrote the *Samgītaratnākara*¹¹²¹ and *Adhyātmaviveka*,¹¹²² and who held an important office at the court of Siṅghaṇa¹¹²³ (A.D. 1210–1247),¹¹²⁴ one of the kings of Yādavagiri. The major obstacle to this hypothesis consists of Śārṅgadeva's genealogy, because it is stated in his *Samgītaratnākara*¹¹²⁵ that he was a son of Sodhala and grandson of Bhāskara, whereas the author of the *Śārṅgadharasaṃhitā* is said to be a son of Dāmodara. P.V. Sharma solves this problem by supposing that the authors of *saṃhitā* and *Paddhati* were already regarded as identical in early times, as a result of which the author of the *saṃhitā* is presented as a son of Dāmodara in the colophons of a number of MSS. Arguments favouring the identity of Śārṅgadeva and the author of the *saṃhitā* are, in P.V. Sharma's opinion, firstly Śārṅgadeva's expert knowledge of medicine,¹¹²⁶ displayed, especially in the field of anatomy, in his *Samgītaratnākara* and *Adhyātmaviveka*, and, secondly, that the *Śārṅgadharasaṃhitā* shows the influence of the *Gadanigraha* of Śodhala, Śārṅgadeva's father. Almost needless to say, this hypothesis is very weak, because there was no reason at all to confuse the authors of *saṃhitā* and *Paddhati*, while, moreover, the attribution of the *Gadanigraha* to the Śodhala who was Śārṅgadeva's father is completely arbitrary, though not impossible with regard to chronology. P.V. Sharma, who expresses some doubt as to the correctness of his hypothesis, concludes that Śārṅgadeva was either the same as the author of the *Śārṅgadharasaṃhitā* or a different person living in the same age.¹¹²⁷

Date

The terminus post quem of Śārṅgadharma can be inferred from information contained in the commentaries on his *saṃhitā* by Āḍhamalla and Kāśīrāma. The former has recorded that Śārṅgadharma consulted a commentary on Vṛnda's *Siddhayoga*,¹¹²⁸ while the latter has mentioned that Śārṅgadharma was acquainted with Tsaṭa's work.¹¹²⁹ Kāśīrāma's commentary contains two remarks¹¹³⁰ which imply that Śārṅgadharma made use of Vaṅgasena's work, one of these¹¹³¹ pointing to his posteriority to Trivikrama, who evidently commented upon Vaṅgasena's treatise, and finally a remark¹¹³² suggesting that Vopadeva preceded Śārṅgadharma.

These data, if reliable, lead to the conclusion that Śārṅgadharma cannot have lived earlier than about 1300, which conflicts with P.V. Sharma's¹¹³³ and Atrideva's¹¹³⁴ claims that he is quoted by Hemādri.¹¹³⁵ The latter's so-called quotation from Śārṅgadharma can, however, be disregarded as a clue to his date, because no source is mentioned by Hemādri and, moreover, only the first of the two verses quoted is found in the *Śārṅgadharasaṃhitā*.

The often repeated¹¹³⁶ claim that Śārṅgadharma must be earlier than Vopadeva, because the latter wrote a commentary on the former's *saṃhitā* is not valid since such a commentary has never been written. The error derives from Weber's Catalogue of Berlin MSS, where MS Nr. 937 is described as containing the *Dīpikā*, called *Gūḍhārthadīpikā*, composed by Vopadeva, son of Keśava, on the *pūrvakhaṇḍa* of

the *Śārṅgadharapaddhati*.¹¹³⁷ As those parts of the text which were printed in the catalogue verbally agree with Kāśīrāma's commentary, called *Gūḍhārthadīpikā*, the MS evidently contains the first part of that work.

Indications with regard to Śārṅgadharma's terminus ante quem are provided by the authors and works referring to or quoting him. The earliest of these are the *Paraśurāmapratāpa*, dating from the first half of the sixteenth century,¹¹³⁸ and Gaṇeśadaivajña's commentary, composed in 1528.¹¹³⁹

The evidence collected shows that the author of the *Śārṅgadharasaṃhitā* lived later than Trivikrama (of unknown date), who wrote a commentary on Vaṅgasena's treatise (A.D. 1050–1100), or even later than Vopadeva (second half of the thirteenth century), if Kāśīrāma's remarks are trustworthy and correctly interpreted, and before the author of the *Paraśurāmapratāpa* and Gaṇeśadaivajña. So he should be placed in the period 1100–1500 or 1300–1500. Śārṅgadharma may have borrowed the definitions of a series of technical terms from Vaṅgasena,¹¹⁴⁰ which would corroborate his posteriority to the latter. P.V. Sharma's assertion¹¹⁴¹ that Śārṅgadharma used Sodhala's *Gadanigraha* as a model for his work, which would prove that Śārṅgadharma is later than Sodhala, is not convincing, because the order of the pharmaceutical preparations in the two works differs considerably, while, moreover, identical prescriptions seem to be absent, though a restricted number of recipes from the *Śārṅgadharasaṃhitā* also occur in Vaṅgasena's treatise and the *Cakradatta*.¹¹⁴² The much more developed stage of *rasaśāstra* in Śārṅgadharma's work, compared with Vaṅgasena's treatise and the *Cakradatta*, as well as the changes in the pharmacopoeia, are indicative of a considerable interval of time between the latter two works and the *Śārṅgadharasaṃhitā*.

Though the *Śārṅgadharasaṃhitā* has usually been placed in the thirteenth century,¹¹⁴³ it might well be preferable to assign it to the fourteenth century, which would agree with the data provided by Kāśīrāma's commentary.¹¹⁴⁴

Commentaries

Three commentaries are known:¹¹⁴⁵ (1) the *Pradīpikā* by Āḍhamalla;¹¹⁴⁶ (2) the *Gūḍhārthadīpikā* by Kāśīrāma; (3) the *Āyurvedadīpikā* or *Gūḍhāntadīpikā* by Rudrabhaṭṭa.

(1) Āḍhamalla's commentary, called *Pradīpikā* in its introductory verses and *Śārṅgadharadīpikā* in the colophons, is the oldest one. In the introduction the author traces his descent in saying that he is of Śrīvāstavya lineage,¹¹⁴⁷ that his grandfather was called Cakrapāṇi¹¹⁴⁸ and his father Bhāvasiṃha.¹¹⁴⁹ He adds that both were physicians and that Bhāvasiṃha, who was an expert in *Suśruta*, earned great fame and was honoured by the king. Āḍhamalla lived in Hastikāntapurī,¹¹⁵⁰ situated on the banks of the Carmaṇvatī,¹¹⁵¹ during the reign of Jaitrasīṃha.¹¹⁵² The introductory verses also indicate that Āḍhamalla, who refers to himself as knowing only a restricted number of treatises (*nibandha*), based his commentary on the words of his teacher.¹¹⁵³ Āḍhamalla's devotion to Kṛṣṇa can be inferred from the concluding verses. One of these concluding verses presents a lacuna, which is especially unfortunate because it may either refer to another work by the same author, a *pañjikā* in 11,000 verses, or

contain information on the date of completion of Āḍhamalla's commentary.

Authors and works quoted or referred to by name in Āḍhamalla's commentary are: Agniveśa (I.7.77cd–79ab; ¹¹⁵⁴ III.13.125–128), Amara (I.1.1.), *asmādiyaśampradāya* (III.11.122cd–128ab), Bhāluki (III.3.9–11), *Bhānumatī* (III.5.31; 6.23), Bhāṭṭāraka-hariścandra (III.11.108–110ab), Bhoja, ¹¹⁵⁵ Bhrgu (III.13.125), Cakra (II.2.43–75; 7.13–16; 9.58–60ab; III.3.14; 5.33; 10.13cd–19ab; 11.108–110ab), *Cakradatta* (II.8.10–22ab; III.4.18cd–20ab; 5.7cd–15ab; 6.8–11ab and 24cd–28ab; 8.14cd–15 and 24–32ab; 10.1–5), Cakṣuṣyepa (I.7.154), Caraka (often), *Dravyaguṇāvalī* ¹¹⁵⁶ (I.4.1a–b), *Drḍhabala* (I.7.105–115ab; III.3.14 and 30; 4.26cd–33; 5.7cd–15ab and 22–30; 6.11; 8.2 and 14cd–15), Gadādhara (I.7.153–171ab), Gayadāsa (I.7.171cd–172ab), *Guṇāvalī* ¹¹⁵⁷ (II.10.7cd–10ab), Hārta (III.13.125), Hiranyākṣa (I.7.189–191ab), Jaijñāta (I.1.6; III.3.14), *jyotiṣśāstra* (I.3.11cd–13ab), Kārtika (III.10.13cd–19ab), Kārttikācārya (I.7.151cd–152), kāśmīrāḥ (III.8.2), Kāśyapa (I.7.196cd–202), Kharanāda (II.9.142–146ab), Khāraṇādi (III.4.12), Mādhava (often), Mādhavācārya's *Svasaṃgraha* (I.7.149cd–151ab), *Mādhavanidāna* (I.7.80cd–82ab), *Mādhavasamgraha* (I.7.153–171ab), *Mūlabhārata* (I.5.48cd–50ab), Nāgārjuna (II.11.44–45), Nāmamālā (II.1.12), *Nāmasamgraha* (I.7.139), *Nighaṇṭu* (II.6.9cd), Nimi (I.7.153–171ab), Pārāśara (III.6.3), *Paribhāṣā* (II.10.3), *Ratnaprabhākara*, i.e., Nīścalakara (III.8.14cd–15), Ravigupta (III.8.2), *Samgraha* (I.7.115cd–121), Sanaka (I.7.38–39), Śāringadhara (often), *Śivamata* (II.11.1), Sudāntasena (III.2.6), Suśruta (often), *suśrutādhyāyinaḥ* (II.6.23–24ab), *tantrāntara* (often), Tīsaṭa (Trisaṭa ad II.6.84; Tīsaṭa ad III.4.1cd–3a–b), ¹¹⁵⁸ Vāgbhaṭa (often), *Vaidyālaṃkāra* (III.2.31ab), *Vaidyaprasāra* (II.7.13cd–15), Videha, ¹¹⁵⁹ *Viṣṇusamhitā* (II.6.81–89), ¹¹⁶⁰ *Vṛddhabhoja* (I.7.27cd–28), *Vṛddhakāśyapa* (I.7.180d–182ab), Vṛnda (II.8.10–22ab; III.3.14), and *Vṛndaṭīppanākāra* (II.8.14).

According to P.V. Sharma ¹¹⁶¹ the *Rasaratnasamuccaya* is repeatedly quoted, which is hard to prove, since this work contains many verses from earlier treatises and is not mentioned by name. ¹¹⁶²

A large percentage of Āḍhamalla's quotations is not referred to a source mentioned by name. The *Mādhavanidāna* is repeatedly quoted anonymously. ¹¹⁶³

Āḍhamalla consulted many manuscripts; ¹¹⁶⁴ he was interested in the correct readings of Śāringadhara's text, as shown by the variants recorded in his commentary and the additional verses occurring in part of the MSS at his disposal. ¹¹⁶⁵

Medicinal plants are occasionally described; ¹¹⁶⁶ many synonyms are recorded, as well as vernacular names. ¹¹⁶⁷

Āḍhamalla's alchemical knowledge appears from his comments on chapters eleven and twelve of the *Madhyamakhaṇḍa*. He mentions among the implements of an alchemist's workshop two types of *tuḷābhājana* (*tuḷā* and *ghaṇṭaka*), three types of *khalva* (*pāṣāṇa*-, *loha*- and *tāmra*khalva), two types of *kaṇḍanī* (*śilā*- and *pāṣāṇakaṇḍanī*), three types of *koṣṭhikā* (*jāla*-, *kharpara*-, *bhūmikoṣṭhikā*), two types of *bhastrikā* (bellows; *kharpara*- and *mukhabhastrikā*). *Mūṣās* are divided into *apakva* and *pakva* types; the *vajramūṣā* is *apakva*; *pakva* types are *gostanā*, *andhamūṣā*, *nalikāmūṣā*, *samputīmūṣā*, *ḍholīmūṣā*, *īṣṭikāmūṣā*, *kṣāramūṣā*, *saindhavādīlavāṇamūṣā*, *kharparamūṣā*, *kokilā-khyamūṣā*, etc. Two types of *saṇḍiśa* are mentioned (*pattra*- and *kākamukhasaṇḍiśa*).

Four types of *puṭa* are acknowledged: *tuṣa*-, *karīṣa*-, *upala*-, and *khadirādīkāṣṭhapuṭa*. The *yantras* listed are *adhahpātana*-, *agnisoma*-, *bāṇa*-, *bhūdhara*-, *cāki*-, *cakra*-, *cāraṇa*-, *ḍamaruka*-, *dolā*-, *gajadantabhājana*-, *gandhakaṭāhikā*-, *garuḍa*-, *jālikā*-, *kacchapa*-, *kāṃsyabhājana*-, *kaṭāha*-, *mūṣā*-, *niyāmaka*-, *pāṣāṇa*-, *pātāla*-, *sāraṇa*-, *śilā*-, *tuḷā*-, *ūrdhva*pātana-, *vālūkā*-, and *vaṃśanalikāyantra*. ¹¹⁶⁸

Āḍhamalla's date is not elucidated by his sources ¹¹⁶⁹ and depends in the first place on the identification of his royal patron Jaitrasimha, who was not the Cāhamāna king of that name, as that would lead to placing Śāringadhara not later than about A.D. 1250. Āḍhamalla may provisionally be assigned to the fourteenth century. ¹¹⁷⁰ The terminus ante quem is provided by a quotation from him in Vallabhabhaṭṭa's commentary on Śāringadhara's *Trīṣaṭī*.

Āḍhamalla is cited in Āsubodha Senagupta's commentary on Govindasena's *Paribhāṣāpradīpa*; Āḍhamalla and his *Śāringadharaṭīppanī* are also quoted in Guḷrāsārnamīśra's commentary on the *Āyurvedaprakāśa*.

Parts of Āḍhamalla's *Pradīpikā* are (anonymously) reproduced almost verbatim in an interpolated portion of the incompletely preserved text of Nīścalakara's *Ratnaprabhā* on the *Cakradatta*. This portion, found in the two BORI MSS, ¹¹⁷¹ covers the larger part of the chapter on *netraroga*, a chapter on *rasādisodhanamāraṇa* (absent from the *Cakradatta*), and the chapter on *śirāvyadha*. The text commented upon is not that of Cakrapāṇi's treatise, but has been borrowed in toto from the *Śāringadharasamhitā*. ¹¹⁷²

Both text and commentary contain numerous variants which are valuable for the establishment of a correct text of the *Śāringadharasamhitā* and Āḍhamalla's commentary.

The unknown author of the interpolated portions adds some references to sources left unmentioned by Āḍhamalla. These sources are: Bhāluki (ad *netraroga* 155); *Carakottaratāntra* (ad *netraroga* 38, 39, 71, 74–76); *Jatūkarṇa* (ad *netraroga* 60–61); *Siddhasāra* (ad *netraroga* 44); *Suśruta* (ad *netraroga* 152 and 155); *Vāgbhaṭa* (ad *netraroga* 152 and 154). The date of the author is posterior to that of the *Yogarātnākara*, which was also drawn upon for a chapter he added. This agrees with the date of one of the BORI MSS (Nr. 63), completed in Bikāner in A.D. 1727. ¹¹⁷³

(2) Kāśīrāma wrote a commentary called *Gūḍhārthadīpikā*, ¹¹⁷⁴ which covers the whole of the *Śāringadharasamhitā*. ¹¹⁷⁵ He does not give us any particulars on his person, except from mentioning at the end that he completed his work under the reign of Śāh Salem, while it also becomes clear from the concluding verses that he was a devotee of Kṛṣṇa. Śāh Salīm has sometimes been identified as the second son and successor of the Afghan ruler Sher Śāh (1540–1545), who died young in 1554. ¹¹⁷⁶ which would place Kāśīrāma in the middle of the sixteenth century. According to P.V. Sharma, in whose view this identification cannot be endorsed because Kāśīrāma quotes the *Bhāvaprakāśa*, ¹¹⁷⁷ which dates from the same period, the Śāh Salīm mentioned at the end of the *Gūḍhārthadīpikā* must be Jahāngīr (1605–1627), who was called Salīm before his succession to Akbar's throne. ¹¹⁷⁸ This view may be correct, though it can be objected that Kāśīrāma does not refer to the *Bhāvaprakāśa* by name and the pertinent verse may derive from some other source put to use by Bhāvamiśra.

Works and authors referred to or quoted by Kāśīrāma are: Agniveśa (III.3.1), *Aśvinīkumāramata* (II.9.93–98), Ātreya (II.9.17–19ab), Bheḍa (III.3.9–11 and 14), Bhoja, Caraka, Gṛā (I.5.57cd–58), Jaijāta (II.9.8), *Madanavinoda* (II.11.40cd–43),¹¹⁷⁹ *Mādhavanidāna* (I.7.12–13), *Madhukośa* (I.7.2–7ab), Nāgārjuna (II.11.48cd–53ab), *Nidāna* (I.7.80cd–82ab, 83–86, 100cd–101, 142–144ab, 146cd–149ab, 149cd–151ab, 153–171ab), *Paribhāṣā* (III.1.6), *Pātañjala* (II.11.48cd–53ab), *Pathyā-pathyanighaṇṭu*¹¹⁸⁰ (II.11.40cd–43), *Rāvaṇa* (I.5.48cd–50ab), *Śataśloki* (II.2.88–94; 6.54–57),¹¹⁸¹ *Suśruta*, *Tisāta* (II.9.66cd–71; III.3.1),¹¹⁸² *Trivikrama* (II.11.60–61ab), *Vāgbhāta*, *Vaṅgasena* (II.2.4 and 88–94; 6.54–57; 7.40–49; 9.66cd–71; 11.60–61ab), *Vaṅgasenādinibandhakāra* (II.6.54–57), *Vaṅgeśvara* (II.11.40cd–43ab), *Viśva* (III.11.1–2), *Viśvakośa* (II.1.2), *Vopadeva* (II.6.54–57),¹¹⁸³ *Vopadevaśataśloki* (II.2.88–94; 6.105cd–107), *Vṛddhasuśruta* (I.7.2–7ab), *Vṛnda* (II.2.4, 88, 162–163ab; 6.105cd–107; 9.66cd–71), and *Vyādī* (I.1.1).^{1184, 1185}

This list enables us to infer that Kāśīrāma is at least later than Madanapāla and probably later than Kaiyadeva. This does not solve the identity of Shāh Salīm.

(Kāśīrāma's) *Gūḍhārthadīpikā* is quoted in Yogendranātha's *Āyurvijñānaratnākara*.¹¹⁸⁶

Kāśīrāma is sometimes confused with Kāśīnātha, the author of the *Ajīrṇamañjarī*.¹¹⁸⁷

Another medical author, also called Kāśīrāma, wrote a *Vaidyasarvasva*,¹¹⁸⁸ about which almost no particulars are known.

(3) Rudrabhaṭṭa or Rudradharabhaṭṭa,¹¹⁸⁹ son of the physician Konerībhaṭṭa, and royal physician to 'Abdu'l-Raḥīm Khān-i-Khānān, wrote a commentary, called *Āyurvedadīpikā* or *Gūḍhāntadīpikā*,¹¹⁹⁰ on the *Śārṅgadharaśaṃhitā*, which has been preserved incompletely¹¹⁹¹ and is said to resemble Ādhamalla's commentary.¹¹⁹² The same author composed a commentary on Lolimbarāja's *Vaidyajīvana* and a comprehensive treatise on therapeutics.¹¹⁹³ According to some, he also wrote a *Samnipātakalikā*.¹¹⁹⁴ Kṛṣṇabhaṭṭa, Konerībhaṭṭa's great-grandfather, has been credited with a commentary on the *Carakasamhitā*.¹¹⁹⁵ As 'Abdu'l-Raḥīm, the son of Bairam Khān, who was the guardian and protector of the young Akbar, lived during the latter part of the sixteenth and the first part of the seventeenth century, Rudrabhaṭṭa lived in that same period.

The *Trīṣaṭī* by Śārṅgadhara

The *Trīṣaṭī*¹¹⁹⁶ or *Jvaratṛīṣaṭī*,¹¹⁹⁷ sometimes called *Vaidyavallabha*,¹¹⁹⁸ is a monograph on fevers by Śārṅgadhara.¹¹⁹⁹

Contents

The work consists of 330¹²⁰⁰ skillful verses in various metres and has some resemblance to a *kāvya*.¹²⁰¹

It begins with a benedictory verse devoted to the sun god, followed by stanzas in praise of Dhanvantari, the Aśvins, and the author's guru, the ascetic (yatipati) Vaikuṇṭhāśrama (1–5). The subject of the treatise is introduced by some verses on the myth-

ical origin of fever (6–9) and its names when occurring in various living beings and even inanimate substances (10–12). The pathogenesis and prodromes of fever are described (13–17), followed by the symptoms and treatment of fevers by one (18–37) and two (38–54) doṣas. A large part of the work is devoted to *saṃnipāta* fevers. After enumerating the symptoms of *saṃnipāta* fever in general, and the varieties called *abhinyāsa*, *hataujas* and *saṃnyāsaka* in particular, the therapy of this fever is dealt with (55–68). Two series of thirteen distinct *saṃnipāta* types follow (70–171 and 172–188). The names and symptoms of the first series, consisting of *saṃdhiga*, *antaka*, *rugdāha*, *cittabhrama*, *karnaka*, *kaṇṭhakubja*, *śītāṅga*, *tandrika*, *pralāpaka*, *raktaṣṭhīvin*, *bhugnadṛś*, *abhinyāsa*, and *jihvaka*, are also found in the *Bhāvaprakāśa* (cikitsā 1.493–505) and *Yogaratanākara* (160–162), but in a changed order and differently worded; the treatment of each type is separately described after the enumeration of its signs; these verses were incorporated unchanged in the *Bhāvaprakāśa*. The names and symptoms of the second series, consisting of *antardāha*, *daṇḍapāta*, *antaka*,¹²⁰² *kumbhīpaka*, *prorūṇāva*, *pralāpin*, *eṇidāha*, *bhūtaḥāsa*, *ajaghoṣa*, *hāridra*, *saṃśoṣin*, *saṃnyāsa*, and *yantrāpīḍa*, were also included in the *Bhāvaprakāśa* (cikitsā 1.510–522), though in a changed order.¹²⁰³ As the fevers of this second series, called *upasaṃnipātas* by the commentator, are incurable, the patient is advised to regard Nārāyaṇa and the water of the Ganges as his only refuge (188).¹²⁰⁴

The remaining part of the work is concerned with the characteristics of incurability of fevers (189–192), the eight ways (*prakāra*) in which fever presents itself, namely *prākṛta*, *vaikṛta*, *saumya*, *tikṣṇa*, *sāma*, *nirāmaka*, *antarvega*, and *bahirvega* (193–197), *doṣapāka* and *dhātupāka* (198–199),¹²⁰⁵ the irregular fevers (*viśamajvara*; 200–216), *pralepaka* fever (217), the symptoms of fevers which have reached the seven tissues (*dhātu*) of the body (218–223), the therapy of the irregular fevers (224–269), the symptoms and treatment of fevers beginning with chills (*śītapūrvā*) or sensations of warmth (*dāhapūrvā*) (270–283), the religious therapy of fevers (284–297), the four types of exogenous (*āgantū*) fevers, namely those caused by *abhighāta*, *abhiśāṅga*, *abhiśāpa* and *abhicāra*, together with their treatment (298–304), the complications (*upadrava*) of fever and their treatment (305–323), the synonyms of fever (324), the signs of release from fever (325–326), and what has to be avoided by a patient suffering from fever (327).

The work ends with three verses containing information on the author.

The *Trīṣaṭī* is quoted in the *Amṛtasāgara* (as the *Trīṣatagrantha*), Hariprapanna's *Rasayogasāgara*, and Yādavajī Trikamaṇī Ācārya's *Siddhayogasamgraha*.

Special features

Religious practices form a substantial part of therapy in the *Trīṣaṭī*.¹²⁰⁶ Some *rasauśadhas* are also present.¹²⁰⁷

Worthy of mention are the following names of medicinal plants: *ākalakṛt* (168),¹²⁰⁸ *āsāluka* (113),¹²⁰⁹ *babbūla* (157), *hārahūrā* (41; 86),¹²¹⁰ *jvālāmukhī* (160), *kāravikā* (321),¹²¹¹ *kulīñja* (168), *rājīphalā* (105),¹²¹² *ūvra* (128, 153, 164),¹²¹³ and *vallavadāru* (142).¹²¹⁴ Opium is twice prescribed (161 and 164).¹²¹⁵

The author

Śārṅgadhara¹²¹⁶ informs us that he is a son of Devarāja, who, of nāgaravaṃśa stock, was a learned poet, honoured by kings and scholars (328). The author was a pupil of Vaikuṇṭhāśrama (4). At the end of his work he praises Śiva and his consort (329). According to Indian scholars, Śārṅgadhara, being a brāhmaṇa of nāgaravaṃśa lineage, lived in Gujārāt.¹²¹⁷

Date

The author of the *Triṣaṭī* was dated to the thirteenth-fourteenth century by G. Hāldār,¹²¹⁸ whereas P.V. Sharma¹²¹⁹ and Atrideva¹²²⁰ assign him to the fifteenth century. The prescription of drugs like ākalakṛt, jvālāmukhī, and tīvra indicates that he is not earlier, but probably later, than the author of the *Śārṅgadharaśaṃhitā*, while he is anterior to Bhāvamiśra who incorporated verses from the *Triṣaṭī* in his *Bhāvaprakāśa*. Hence he may provisionally be placed in the early fifteenth century.

Commentaries

At least three commentaries were written on the *Triṣaṭī*: (1) the *Vaidyavallabha* by Vallabhabhaṭṭa;¹²²¹ (2) the *Siddhāntasaṃcaya*¹²²² by Nārāyaṇa,¹²²³ son of Kṛṣṇa, brother of Nāganātha and pupil of Nāgeśa; (3) a commentary by Dāsapaṇḍita.¹²²⁴

Authors and works quoted or referred to by Vallabhabhaṭṭa are: *Abhidhāna* (77), *Amara* (4, 6, 76, 154, 284), *Bhāluki* (325), *Bhārata* (7), *Cakra* (20), *Caraka* (20, 69, 224), *Dallāṇa* (20), *Halāyudha* (66, 76, 83), *Hārīta* (20), *Karmavipākā* (240, 242, 248, 251, 253, 286, 289), *Madanavinoda* (234), *Madhukośakāra* (69), *navāśasūrutamata* (213), *Nighaṇṭu* (78), *Samgraha* (20, 69), *Simhāvalokita* (284),¹²²⁵ *Suśruta* (many times), *Vāgbhaṭa* (many times), *Viśva* (4, 89),¹²²⁶ *Vṛddhasuśruta* (172–173), *Yādava* (220),¹²²⁷ and *Yogamālā* (238).

This list of sources enables us to conclude only that Vallabhabhaṭṭa and the *Triṣaṭī* are probably later than the *Vīrasimhāvaloka*, dating from 1383, which is in favour of placing the *Triṣaṭī* in the fifteenth century.

A ṭīkā on the *Triṣaṭī* is quoted in Kṛṣṇadatta's commentary on Trimalla's *Śataśloki*.

R.G. Harshe¹²²⁸ has brought forward that the quotations from *Madguruvalabhā* and *Vidvadvaidyavallabha* in Śivadatta's auto-commentary on the *Śivakośa* may be from Vaidyavallabha's commentary on the *Triṣaṭī*, which, if correct, would fix its terminus ante quem as 1677/78.

Siddharṣi

Siddharṣi was the author of the *Siddhayogamālā*, a short collection of prescriptions against various diseases.¹²²⁹

Simha

Simha was the author of a *Nibandha*, completed in 1471/72.¹²³⁰

Soḍhala

Soḍhala was the author of two important works, (1) the *Soḍhalanighaṇṭu*¹²³¹ and (2) the *Gadanigraha*.¹²³²

(1) The Soḍhalanighaṇṭu

The *Soḍhalanighaṇṭu*¹²³³ consists of two parts, a section on synonyms and homonyms, the *Nāmasaṃgraha*,¹²³⁴ and one on the properties and actions of drugs, the *Guṇasaṃgraha*.¹²³⁵ This arrangement of the material constitutes an unprecedented innovation. The work is written in verse, mostly śloka, with longer metres in the introductory and closing stanzas of both sections. The *Nāmasaṃgraha* contains about 790 and the *Guṇasaṃgraha* 1,260 verses.

Contents

The *Nāmasaṃgraha* opens with ninety-five verses, the first eight of which are introductory, while the remaining eighty-seven are about the uses of the drugs belonging to the seven groups (varga) distinguished by Soḍhala. The names and synonyms of the drugs belonging to each of these seven vargas are enumerated in seven chapters: (1) guḍūcyādi, (2) śatapuspādi, (3) candanādi, (4) karavīrādi, (5) āmrādi, (6) suvarṇādi, (7) lakṣmaṇādi. The homonymic part of the nighaṇṭu, the *anekārthavarga*, dealing with words designating medicinal substances, is subdivided into four adhikāras, which contain words having respectively two, three, four and five meanings (dvyyarthaśadha, etc). The *Nāmasaṃgraha* ends with a miśrakavarga, chiefly on groups of substances, and four closing lines. A short pariśiṣṭa section is concerned with synonyms designating water, milk, butter, etc.

The *Guṇasaṃgraha* begins with eleven introductory verses, followed by a *dravyāvalī*, in which the names of all the drugs of the seven vargas are enumerated in their due order. The next part is on *dravya*, *rasa*, *vīrya*, *vipāka*, and *prabhāva*. The main portion consists of a description of the qualities and actions of the drugs, classified according to the seven vargas. Eighteen subsequent vargas treat of the qualities and actions of dietetic articles: *pāṇīya*-, *kṣīra*-, *dadhi*-, *takra*-, *navanīta*-, *ghṛta*-, *taila*-, *madhu*-, *ikṣu*-, *māḍya*-, *mūtra*-, *śūka*-, *dhānya*-, *jūrṇa*-, *trṇadhānya*-, *śimbidhānya*-, *kṛtāṇna*-, *anupāna*-, and *māṃsavarga*. The last chapter, *miśrakādhyāya*, deals with miscellaneous subjects. The treatise ends with about eight concluding lines.

Soḍhala states¹²³⁶ that he composed his *Nāmasaṃgraha* in agreement with the names mentioned by Dhanvantari. This raises the question of Soḍhala's sources. In P.V. Sharma's opinion, he was acquainted with the *Dravyāvalī*, and early version of the *Dhanvantarīyanighaṇṭu*, because of this reference to Dhanvantari, the presence of a somewhat similar *dravyāvalī* in both *Soḍhala*- and *Dhanvantarīyanighaṇṭu*, and the close resemblance, as to names and composition, of the vargas in both texts.¹²³⁷

Regarding the last point, the first six vargas bear identical names, but the last one, called *lakṣmaṇādi* in the *Soḍhala*- and *miśra* in the *Dhanvantarīyanighaṇṭu*, is an exception. The composition of the first six vargas, which is indeed remarkably similar, shows that the *Dhanvantarīyanighaṇṭu* contains a more expanded version of the

same matter when compared with the *Soḍhalanighaṇṭu*,¹²³⁸ though, on the other hand, a number of medicinal plants described by Soḍhala are absent from the *Dhanvantarī-yanighaṇṭu*.¹²³⁹ The relationship between both works deserves special study.¹²⁴⁰

It is too early, in my view, to agree with P.V. Sharma in claiming that the *Soḍhalanighaṇṭu* has a tenth-century version of the *Dhanvantarinighaṇṭu* as one of its main sources.¹²⁴¹

Soḍhala mentions Vāgbhaṭa with reverence¹²⁴² and indicates himself some of his sources: Agniveśa, Karāla, *Aṣṭāṅgasamgraha* and *Aṣṭāṅgharḍaya*.¹²⁴³ In P.V. Sharma's view, he also borrowed from Ḍalhana, but the resemblances are rather superficial.¹²⁴⁴

Soḍhala is referred to as a source in Jayaratna's *Jvaraparājaya*.¹²⁴⁵ The *Soḍhalanighaṇṭu* was one of the sources of Raghunāthaji's *Nighaṇṭusamgraha*; it is quoted in the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Brhannighaṇṭuratnākara* and Śivādāsena's commentary on the *Cakradatta*.¹²⁴⁶ Niścāla's *Ratnaprabhā* contains an anonymous quotation that is found in the *Guṇasamgraha*.¹²⁴⁷

Special features

The presence of a special chapter on jūrṇā (*Guṇasamgraha* 916–919) is quite a novel feature in a nighaṇṭu.

The list of remarkable names of plants found in Soḍhala's work is very long. Though unusual names occur in all parts of the work, a majority form part of the lakṣmaṇādivarga:¹²⁴⁸ abhilāta (629–630),¹²⁴⁹ andhaka (667),¹²⁵⁰ aṅḡaraketu (693–694), āśālīma (691),¹²⁵¹ āśmavalka (665),¹²⁵² avanti (670–672),¹²⁵³ bhṛṅgī (663),¹²⁵⁴ dudumbhaṭī (658), ḍilla (651),¹²⁵⁵ devagandhārikā (675), ḍulupuṣpa (668),¹²⁵⁶ durmīla (651), gaṅḡāṭī (683),¹²⁵⁷ ghaṇṭāvalī (664),¹²⁵⁸ ghotaka (677), girimati (652),¹²⁵⁹ guḍadilla (654), jalajambū (694–695),¹²⁶⁰ jayanti (670–672),¹²⁶¹ jayavati (671–672),¹²⁶² jīrāvalī (687),¹²⁶³ kañcaka (656), karabha (688),¹²⁶⁴ kekidaṇḍā (651),¹²⁶⁵ kiṭagandhā (598),¹²⁶⁶ kṣutkarī (681–682),¹²⁶⁷ laghukacchū (648),¹²⁶⁸ madhyāhnikā (689),¹²⁶⁹ mahārāṣṭrī (696),¹²⁷⁰ maitrī (657),¹²⁷¹ māḡṣika (695), mālāphala ((676),¹²⁷² maṇḍhiḍhi (661), markośa (674), māsālī (693), māyuka (660),¹²⁷³ nāḡārjunī (673),¹²⁷⁴ nākanārī (649), nārācī (665), narapuṣpa ((690),¹²⁷⁵ nimbī (657),¹²⁷⁶ palāśinī (678),¹²⁷⁷ panasī (682), parpoṭī (664),¹²⁷⁸ pāśānī (685), phūti (647), siddheśvara (677),¹²⁷⁹ sphūrdana (674),¹²⁸⁰ śṛṅgārīṭṭī ((666),¹²⁸¹ takṣakī (679), tāmravallī (650),¹²⁸² uṃśadāra (666), ūśandī (696),¹²⁸³ vallīyaka (669),¹²⁸⁴ vaṭu (688), and viṣakharparikā (661).¹²⁸⁵

Noteworthy names from other parts of the *Nāmasamgraha* are, for example: bakāyini (123),¹²⁸⁶ bhilla (73),¹²⁸⁷ bhṛṅgārī (143–144),¹²⁸⁸ kāṣṭhapātālā (172),¹²⁸⁹ kṣīranadī (195),¹²⁹⁰ liṅgabhedā (76), raktapādī (51),¹²⁹¹ śāṅkhayūthikā (628), tiktajīvanī (194), and vārṣikī (621–622).

Remarkable names from the *Guṇasamgraha* are: aṅḡarakā (369ab), bodāraśṛṅḡaka (579), drakṣūṇa (582), drṣatpunarnavā (249), gippita (583),¹²⁹² godhāmāṭī (559), jāka (588), jvalatpuṣpa (578),¹²⁹³ lāmikā (582), modayanti (577),¹²⁹⁴ rājaśola (570–571),¹²⁹⁵ srastarī (318–319), and yavaciñcī (37; 394).

The form of several words from these lists indicates that Soḍhala was not averse to the use of Prakrit, a fact which he states explicitly at the end of the *Nāmasamgraha*. A word like gunda,¹²⁹⁶ with the meaning of Sanskrit niryāsa, is freely employed by

him (e.g., *Guṇasamgraha* 589). A late loan-word like sābūna¹²⁹⁷ is also found in the *Guṇasamgraha* (590).¹²⁹⁸

(2) The *Gadanigraha*

The *Gadanigraha* is, like the *Soḍhalanighaṇṭu*, composed of two distinct parts, a collection of formulae arranged according to the several types of pharmaceutical preparations, and a comprehensive text dealing with both nidāna and cikitsā, arranged in agreement with the eight aṅgas of āyurveda. Its model may have been Candrāṭa's *Yogaratra-samuccaya*, which, though mainly a collection of recipes, also contains a therapeutic part called gadaśānti.

Contents

The first part of the *Gadanigraha*, the prayogakhaṇḍa, counting 2,700 verses¹²⁹⁹ and thus covering about a quarter of the whole treatise, is divided into six adhikāras, on ghṛta, taila, cūrṇa, guṭikā, leha, and āśava¹³⁰⁰ respectively. Its structure therefore closely resembles Candrāṭa's *Yogaratra-samuccaya*, which is composed of eight adhikāras, namely ghṛta, taila, cūrṇa, guṭikā, avaleha, gadaśānti, pañcakarman, and kalpa. The chapter on āśavas is new in Soḍhala's work; a chapter on kalpa and a section (khaṇḍa) on pañcakarman form part of the *Gadanigraha* too.

Soḍhala mentions his sources by name in part of the ghṛtādhikāra only, up to verse 252ab. The authorities mentioned are: Agniveśa (32cd–35ab; 40cd–43ab; 66cd–68ab; 92–94; 150–153; 158–161; 162–168; 194–197), Bheda (72–76; 77–86ab; 95–101; 200–207), *Cikitsākalikā* (233–234), Hārīta (43cd–47ab; 47cd–49; 50–54ab; 54cd–60ab; 68cd–71; 89–91; 154; 185–187ab; 208–211), Jatukarṇa (169–176ab), Kharanāda (102–108ab; 242cd–249ab), Kṛṣṇātreya (114cd–118; 176–183ab; 198–199; 222–225ab; 225cd–230), Kṣārapāṇi (183–184), *Siddhasāra* (64cd–66ab), *tantrāntara* (249cd–252ab), Vāgbhaṭa (108cd–111ab; 155; 156–157), Vaideha (124–129), and Videha (212–217).

This procedure is surprising and hard to explain. P.V. Sharma¹³⁰¹ believes that Soḍhala indicated these sources according to what he found in Candrāṭa's *Yogaratra-samuccaya*, but that, as Candrāṭa refers to his sources from beginning to end, only a defective copy of the *Yogaratra-samuccaya* was at Soḍhala's disposal.

Other sources of Soḍhala may have been Vṛnda's *Siddhayoga*,¹³⁰² Cakrapāṇi's *Cikitsāsamgraha*,¹³⁰³ and Vaṅgasena's treatise.¹³⁰⁴

One formula¹³⁰⁵ is said to derive from Lokasena, a resident of the Nandavihāra, who transmitted it to a bhikṣu.

Interesting names of drugs found in chapters one to five of the prayogakhaṇḍa are: brahmavinirmīṭā (cūrṇa 156),¹³⁰⁶ candrapriyā (guṭikā 452),¹³⁰⁷ dhūrtapatnī (guṭikā 447),¹³⁰⁸ ghotaka (ghṛta 384),¹³⁰⁹ indrikā (ghṛta 371),¹³¹⁰ jīvanī (taila 365),¹³¹¹ jvālāmukhī (taila 524),¹³¹² kaṃsella (leha 45),¹³¹³ kūṭaśālmali (cūrṇa 416),¹³¹⁴ mahāparpataka (taila 375),¹³¹⁵ mahotikā (taila 339),¹³¹⁶ parśucchinna (taila 524),¹³¹⁷ sāraka (cūrṇa 435),¹³¹⁸ śītapuṣpaka (guṭikā 13),¹³¹⁹ sudhākārākhyā (cūrṇa 323),¹³²⁰ sumarkaṭī (ghṛta 397),¹³²¹ vārḍhiphala (cūrṇa 297),¹³²² vāraṇarohiṇī (taila 365),¹³²³ vṛddhailā (cūrṇa 44),¹³²⁴ and yakṣahastaka (ghṛta 425).¹³²⁵

The chapter on āsava presents some interesting features. It describes the nine sources of āsava (20–21), i.e., tvac, patra, kāṇḍa, puṣpa, sāra, mūla, phala, dhānya, and sitā (sugar); it proceeds with giving details on these nine types. It enumerates six types made of dhānya (122), twenty-six of phala (23–25), eleven of mūla (26–27), twenty of sāra (27cd–28), ten of puṣpa (29–30ab), four of kāṇḍa (30cd), two of patra (31ab), four of tvac (31cd), and one of sitā (32a). One of the āsava, namely the varuṇāsava (324–336), is a contribution by Soḍhala himself, as indicated by the author.

Noteworthy drugs prescribed in the āsava chapter of the prayogakhaṇḍa of the *Gadanigraha* are: ¹³²⁶ ākallaka (296; 319; 331), ¹³²⁷ babbūli (132), ¹³²⁸ balābīja (294 and 317), dhamāsaka (267), ¹³²⁹ gajaśeluka (297), ¹³³⁰ hārahūrā (368), kabāba (319 and 332), kalaūñji (316), ¹³³¹ kaliñja (267), ¹³³² kāyaphala (267), ¹³³³ kubjaka (281), mācīkā (142 and 185), mastakī (249), ¹³³⁴ nepālī (243), ¹³³⁵ posta (317), ¹³³⁶ ūtiṅgaṇa (296), ¹³³⁷ and vijayā (320). ¹³³⁸ Kuliñjana ¹³³⁹ is found in another chapter (leha 342). The term arka is met with in this treatise for the very first time (āsava 271–274). ¹³⁴⁰ P.V. Sharma claims that opium is also prescribed. ¹³⁴¹

The greater part (7,354 verses) of the *Gadanigraha* is composed of nine khaṇḍas on kāyacikitsā, śālākyaṇṭra, śalyaṇṭra, bhūtaavidyā, kaumāratantra, viṣatantra, rasāyanatantra, vājīkaraṇatantra, and pañcakarman.

The diseases are systematically assigned to one of the aṅgas, which is a new feature, and their order only partially agrees with the *Mādhavanidāna* for this reason, though Soḍhala basically accepted the latter work as authoritative and incorporated the whole of it in his own treatise. The differences between Mādhava and Soḍhala are only of a minor nature. The chapters on vṛddhi and vidradhi interchanged their places. Mādhava's chapters on unmāda and apasmāra were transferred to the khaṇḍa on bhūtaavidyā; the chapter on unmāda was divided into two, one on bhūtonmāda, the other on unmāda. The arrangement of the chapters on śālākya differs from Mādhava's; their order is śiro-, karṇa-, netra-, nāsā-, and mukharoga. The khaṇḍa on śalya has ten chapters: granthy-apacy-arbuda-galagaṇḍa, ślīpada, vṛṇaśoṇa-dvivraṇīya, sadyo-vraṇa, bhagna, nāḍivraṇa, bhagandara, upadaṃśa, śūkadoṣa, and kṣudrāroga, which means that Soḍhala accepted Mādhava's order, but made the latter's two chapters on vṛṇaśoṇa and śārīravraṇa into one. It should be noted that the chapter on vidradhi is to be found in the khaṇḍa on kāyacikitsā and not in that on śalya, though it forms part of a series of śalya chapters in the *Mādhavanidāna*.

The matter dealing with kaumāratantra was not only slightly rearranged by Soḍhala, in comparison with Mādhava's work, but also expanded. The khaṇḍa on this subject has twelve chapters: pradara, yoniroga, garbhasrāva, mūḍhagarbha, vandhyā, yonīśukradoṣa, sūtīkāroga, stanaroga, yonigāḍhīkaraṇa, ¹³⁴² yoninīrlomīkaraṇa, ¹³⁴³ bālāroga, and bālagraha. The chapter on yoniroga corresponds to Mādhava's chapter on yonivyāpad and yonikanda, those on garbhasrāva and mūḍhagarbha correspond to Mādhava's chapter on mūḍhagarbha, that on stanaroga agrees with Mādhava's chapters on stanaroga and stanyaduṣṭi, and those on bālāroga and bālagraha correspond to Mādhava's chapter on bālāroga. The chapters on vandhyā, yonīśukradoṣa, yonigāḍhīkaraṇa and yoninīrlomīkaraṇa, which have no verses on nidāna, are

additions.

The first chapters of the viṣatantra agree with the last chapter of the *Mādhavanidāna*, while the remaining seven are on therapy. The rasāyanatantra is of a composite nature; its first chapter is about rasāyana, the second (auśadhikālpa) is concerned with kālpa useful in rasāyana, the third (bheṣajakālpa) is on various pharmaceutical preparations and measures, the fourth treats of dinacaryā, and the fifth of ṛtucaryā.

The sources of the verses contained in these nine khaṇḍas are indicated in a few instances: *Vṛddhavāgbhata* (kāya 1.450–451), *Suśruta* (1.461–462), and *Vāgbhata* (1.547–549). Parts of the second chapter of the rasāyanatantra (auśadhikālpa) have been taken from the *Aṣṭāṅgasamgraha*. ¹³⁴⁴

The *Gadanigraha* is quoted in Hariprapanna's *Rasayogasāgara*, Jayaratna's *Jvara-parājaya*, ¹³⁴⁵ Viśvanātha Dvivedī's *Rasendrasambhava*, Yādavji Trikamji's *Rasāmṛta*, and in the *Yogaratanākara*. It is one of the sources of Āryadāsa Kumārasiṃha's *Kvāthamanimālā*, Devasiṃha Viṭthal's *Bṛhadāsavārīṣṭasamgraha* and of the *Rasoddhāra-tantra*.

Special features

The *Gadanigraha* contains in those parts which are devoted to nidāna a rather considerable number of extra verses which are not found in the *Rogavinīscaya*. Some of these are appended to the verses taken from Mādhava and indicated as prakārantareṇa lakṣaṇāni, ¹³⁴⁶ others occur at various places and describe specific syndromes. Examples of the latter category are: kāya 2.117 (pravāhikā), 5.30–32 (bhasmaka), 7.20 (hāridraka), ¹³⁴⁷ 19.160 (katigraha); kaumāra 11.18–21ab (kṣīrālasaka). ¹³⁴⁸

Mention is made of some syndromes unknown from earlier texts, such as a pañcāhasambhava jvara (kāya 1.535–536) and ṣaḍdinodbhava jvara (1.536–537). ¹³⁴⁹ Soḍhala incorporated the diseases called vardhma (kāya 35.11–12), snāyuka (kāya 40.41–43) and somaroga (kaumāra 1.63–68). ¹³⁵⁰ The disorder called śleṣmapitta may have been described for the first time by Soḍhala (kāya 38.12). ¹³⁵¹ The terms śtālī (kāya 41.68 and 70) and śtālīkā (41.68 and 71–73), used by Soḍhala in his chapter on masūrīkā, are among their earliest occurrences. ¹³⁵² Remarkable is the fact that Soḍhala regarded blood as a doṣa on the same footing as kapha and pitta, at least in an isolated instance (kāya 19.88). The terms rasendrabhoktar (vājīkaraṇa 125) and sūtasevin (vājīkaraṇa 135) tell in favour of the developed state of rasaśāstra in Soḍhala's times.

Religious elements play a minor role in this author's therapeutics, but the mention of a rākṣasī called Dundubhī (kāya 1.556–557), to be honoured in cases of fever, should be noted, as well as the employment of the Mahāmāyūrī (bhūta 1.47).

The plant mārkaṇḍī may well be found for the first time in the *Gadanigraha* (kāya 9.46 and 33.76), ¹³⁵³ as well as the substance designated by the term tavarāga (kaumāra 1.55 and 11.121), a synonym of yavāśaṅkarā. ¹³⁵⁴ Among the rare medicinal substances from the *Soḍhalanighaṇṭu* only a few are prescribed in the *Gadanigraha*, e.g., palāśinī (kāya 32.103 and 107) and bodāraśṛṅga (śalya 8.26).

On the other hand, the *Gadanigraha* mentions a number of medicinal plants which were not included in the *Nighaṇṭu*, e.g., āhulī (kāya 7.64), bhūmijayantī (kāya 1.557), brahmadaṇḍī (kāya 1.607), ¹³⁵⁵ choḥāra (kāya 6.34), ¹³⁵⁶ cīñcīnī (kāya 1.220), ¹³⁵⁷

citrāṅgī (kāya 1.644),¹³⁵⁸ devaṅgarī (kāya 30.88),¹³⁵⁹ dhārādharma (kāya 1.480),¹³⁶⁰ erakā (kāya 39.55),¹³⁶¹ ghṛtapura (kāya 35.53),¹³⁶² girikadambaka (kaumāra 11.107),¹³⁶³ gopālakarkarī (kāya 29.61),¹³⁶⁴ karṇamoṭa (śālya 3.63),¹³⁶⁵ kaṭudugdhikā (kāya 4.179),¹³⁶⁶ kaṭutṛṇa (kāya 1.480),¹³⁶⁷ kṛṣṇabhramarikā (śālākya 2.83),¹³⁶⁸ kṛṣṇalā (kaumāra 10.7),¹³⁶⁹ kṣīrapotakī (kāya 22.38),¹³⁷⁰ māyāphala (kaumāra 9.17),¹³⁷¹ mūlakaśuṇṭha (kāya 1.406),¹³⁷² pañcānana (kāya 10.69),¹³⁷³ riṅgiṇī (kāya 23.82),¹³⁷⁴ sitakesāra (kāya 23.134),¹³⁷⁵ utiṇṭa (kāya 41.68),¹³⁷⁶ vaidyāmṛta (kāya 1.476),¹³⁷⁷ vallitaru (kāya 19.201),¹³⁷⁸ varṇojjvala (kāya 31.29),¹³⁷⁹ and vīrabhaṭī (bhūta 1.78).¹³⁸⁰ The term khapura is used as a synonym of niryāsa in jīṅgiṇīkhpura (kāya 19.197). The term amlavetasa is employed in a peculiar way (rasāyana 2.5).¹³⁸¹

The author

Soḍhala belonged, as he indicates himself,¹³⁸² to a Rāyakavāla¹³⁸³ family of the Vatsa gotra. Besides being conversant with āyurveda, he was an expert in sāhitya, jyotiḥśāstra, and vyākaraṇa.¹³⁸⁴ According to some, he was the son of a physician called Svachha, according to others his father's name was Nandana.¹³⁸⁵ The name of his teacher is sometimes said to be Saṅghadayālu¹³⁸⁶ or Asoḍha.¹³⁸⁷ Judging from the maṅgalācāraṇa of *Nāma-* and *Guṇasaṃgraha*, he was probably a devotee of Sūrya, the sun god.¹³⁸⁸ Since Rāyakavāla brāhmaṇas belong to Gujarāt, it can safely be assumed that Soḍhala lived there, the more so because he uses names of drugs which are current in that region.¹³⁸⁹

P.V. Sharma assumes that the author of the *Soḍhalanighaṇṭu* and *Gadanigraha* is the same as Soḍhala, son of Bhāskara, and father of the Śāringadeva who composed the *Samgītaratnākara* and *Adhyātmaviveka*. This Soḍhala, who was a descendant of Vṛṣaṅga, migrated from Kāśmīr to the South, and was an accountant-general attached to the court of the kings Bhīllama (1175–1191), Jaitra (1191–1210) and Siṅghaṇa (1210–1247) of the Yādava dynasty, an office which was held by Śāringadeva too. The family of this Soḍhala was composed of physicians and even Śāringadeva himself was not only a musician and poet, but also a medical practitioner well versed in āyurveda.¹³⁹⁰ The Yādava king Bhīmadēva II had a copper plate inscribed in the year 1256, recording donations to the son of a Soḍhala from a Rāyakavāla brāhmaṇa family who was an expert in jyotiḥśāstra.¹³⁹¹

Certainty cannot be reached with regard to P.V. Sharma's assumption, but his reasoning does not carry conviction.¹³⁹²

Date

Internal evidence from the *Gadanigraha* proves that Soḍhala is posterior to Ravigupta, Mādhava (the author of the *Mādhavanidāna*), Vṛnda, Tisāṭa, Candratā, and Vaṅgasena. The absence from the *Gadanigraha* of the majority of the mercurial and other metallic preparations found in the therapeutic treatises of Cakrapāṇi and Vaṅgasena may be due to the Bengal origin of these two authors, for this type of preparation came into use in Bengal first.¹³⁹³

The relationship between the *Soḍhalanighaṇṭu* and an early version of the *Dhanvantarinighaṇṭu*, postulated by P.V. Sharma, cannot be used for chronological purposes,

because the hypothesis is unnecessary and vague. The same author's assumption that Soḍhala borrowed from Ḍalhaṇa is unacceptable. The fact that the names of new drugs borrowed from Islamic medicine occur in prescriptions of the *Gadanigraha* appears to prove that Soḍhala cannot be placed earlier than about A.D. 1200, a date that is in agreement with what is known about Soḍhala's sources. That Soḍhala was active during the first half of the thirteenth century and held some office at the Yādava court may be corroborated by his description of two medicinal preparations named after king Siṃhaṇa.¹³⁹⁴ Soḍhala's terminus ante quem cannot be determined by means of quotations in which the source is specified, but it is very likely that his works were used by many later authors. This seems beyond doubt in the case of Vopadeva, who adopted a number of verses from the *Guṇasaṃgraha* (1068d–1069ab; 1070–1071) in his *Siddhamantraprakāśa* (ad *Siddhamantra* 76), which is in support of placing Soḍhala in the first part of the thirteenth century. Bhāvamiśra is also an author who certainly borrowed from the *Soḍhalanighaṇṭu*.¹³⁹⁵

According to P.V. Sharma,¹³⁹⁶ Soḍhala's works were also put to use by the author of the *Hārītasamhitā*, Keśava, Niścalakara,¹³⁹⁷ Śāringadhara, Madanapāla, and the author of the *Rājanighaṇṭu*; P.V. Sharma also claims that Niścalakara quotes the *Soḍhalanighaṇṭu*, without mentioning the name of his source.¹³⁹⁸ The *Soḍhalanighaṇṭu* may have been one of the sources for the chapters on materia medica of Ṭoḍara's *Āyurvedasaukhyā*.¹³⁹⁹ The relationship between Soḍhala and the author of the *Mādhavadravyagūpa* remains undetermined.¹⁴⁰⁰ The available evidence, taken together, is in favour of assigning Soḍhala to the period around 1200.¹⁴⁰¹

The *Mānasollāsa* ascribed to Someśvara

The *Mānasollāsa*¹⁴⁰² or *Abhilaṣitārthacintāmaṇi*,¹⁴⁰³ an encyclopaedic work, ascribed to king Someśvara,¹⁴⁰⁴ contains sections which pertain to medicine.

Contents

The *Mānasollāsa* is a voluminous text of one hundred chapters (adhyāya), arranged into five groups of twenty chapters each (viṃśati or prakaraṇa). It was composed for use by the king and the members of the royal court, and deals with all aspects of daily life. Only those parts of the work which relate to human medicine will be discussed here.¹⁴⁰⁵

The first viṃśati has some verses on foods and drinks to be avoided by a king (abhakṣyavarjanādhyāya: 45–52).¹⁴⁰⁶ It also contains a chapter that is largely devoted to medicine (dīnānāthārtabandhubhṛtyapoṣaṇādhyāya: 135–304). Its main part (vaidyaka: 135–292) is about the treatment of various internal diseases, amongst which fever predominates (jvara: 145–199),¹⁴⁰⁷ while some verses on surgery are appended to it (285–290). The prescriptions contain well-known vegetable drugs. This section on therapy is followed by a short list of synonyms of some medicinal substances (auśadhinighaṇṭu: 292–300).

The second viṃśati has an interesting section on rasāyana (10–51),¹⁴⁰⁸ verses on the qualities required in a cook (sūdalakṣaṇa: 134–137)¹⁴⁰⁹ and a physician

(vaidyalakṣaṇa: 138–145),¹⁴¹⁰ a short section on alchemy, especially auri- and argentification (dhātuvāda-rasāyana: 377–394),¹⁴¹¹ and a section on gems (403–536).¹⁴¹²

The third viṃśati, which deals with enjoyments (upabhoga) of the king, describes the residences (grha; 906–926),¹⁴¹³ baths (snāna; 927–953),¹⁴¹⁴ footwear (pādukā; 954–958),¹⁴¹⁵ ointments (vilepana; 980–1008),¹⁴¹⁶ clothing (vastra; 1009–1041ab),¹⁴¹⁷ garlands (mālya; 1041cd–1048ab),¹⁴¹⁸ ornaments and jewels (bhūṣa; 1048cd–1132ab),¹⁴¹⁹ seats (āsana; 1132cd–1150),¹⁴²⁰ chowries (cāmara; 1151–1160),¹⁴²¹ foods (annabhoga; 1342–1600)¹⁴²² and drinks (pānīyabhoga; 1601–1629),¹⁴²³ which are suitable to a royal person. It adds verses on betel chewing (tāmbūla; 959–979),¹⁴²⁴ ointments for the feet (pādābhyaṅga; 1630–1638),¹⁴²⁵ vehicles (yāna; 1639–1659),¹⁴²⁶ parasols (chattra; 1660–1669),¹⁴²⁷ couches (śayya; 1670–1696),¹⁴²⁸ incenses (dhūpa; 1697–1712),¹⁴²⁹ and rules for his contacts with women (yoṣita; 1713–1820).¹⁴³⁰

The fourth viṃśati contains verses on wondrous feats (camatkāravinoda: 1433–1493), and the fifth verses on alcoholic drinks and the way they should be consumed (madirāpānakrīḍā: 426–514).¹⁴³¹

The *Mānasollāsa* is one of the sources of Basava's *Śivatattvaratnākara*.

Special features

Interesting terms are daka (1.170)¹⁴³² and lāvaṇika (1.171).¹⁴³³ The auśadhanighaṇṭu gives some names of medicinal plants current in Kaṇṇāṭaka.¹⁴³⁴ The main ingredients of the prescriptions in the rasāyana section are śālmālī, hastikarṇī, muṇḍī, śvetabrahmavṛkṣa, and amarī.¹⁴³⁵ A king should make use of the vātātāpika method of rasāyana, since the kuṭīprāveśika method is not suited to him.

A disease called jalagraha (2.41)¹⁴³⁶ and the disorder known as lūtā (2.42) are mentioned in the rasāyana section.

Some dishes, both vegetarian and non-vegetarian, described in the section on annabhoga of viṃśati three are: ¹⁴³⁷ āṅgārapolikā (1382), antraśuṇṭhaka (1493), bhaḍitraka (1465), bhūṣikā (1481), cakkaḷikā (1436, 1437, 1439, 1441), ghārikā (1403), ghosaka (1393), ghṛtakarkāṭa (1542), idarikā (1401), karpūramāgiṇī (1563), kāsāra (1387), kaṭakarna (1396), kavacandī (1456), khārakhaṇḍa (1534), kośalī (1482), kṛṣṇapāka (1475), majjikā (1573), nandīāvarta (1539), pāhalikā (1385), pañcavarṇī (1491), polikā (1383), pūrabhaṭṭāka (1484), puriyala (1461), sohalā (1384), suṇṭhaka (1435, 1436, 1447, 1458), utkvāthita (1509), upakhaṇḍaka (1515), varṇasuṇṭhaka (1501), varṣolaka (1417), and vaṭṭimaka (1487).

Noteworthy names of vegetables in the same section are: amlaharidrakā (1563), amlapattī (1552),¹⁴³⁸ kuhirī (1557), māgiṇī (1563), maruka (1551),¹⁴³⁹ nandana (1555), śeḍhaka (1552), vanamāgiṇī (1563), and vaṭṭāṇa (1393).

The author and his date

Although attributed to king Someśvara himself,¹⁴⁴⁰ the *Mānasollāsa* was obviously composed by some learned paṇḍit attached to the royal court,¹⁴⁴¹ because Someśvara is highly praised in the work.¹⁴⁴²

Someśvara III,¹⁴⁴³ surnamed bhūlokaṃalla,¹⁴⁴⁴ satyāśrayakulatilaka,¹⁴⁴⁵ and cā-

lukyābharāṇa,¹⁴⁴⁶ was the son of the famous king Vikramāditya VI and belonged to the line of the Western Čālukyas,¹⁴⁴⁷ who had their capital at Kalyāṇa.¹⁴⁴⁸ He reigned from A.D. 1126 or 1127¹⁴⁴⁹ to 1138.¹⁴⁵⁰

The *Mānasollāsa* was completed in A.D. 1130/31.¹⁴⁵¹

The *Parahitasamhitā* by Śrīnāthapaṇḍita

The *Parahitasamhitā* by Śrīnāthapaṇḍita¹⁴⁵² is a comprehensive medical treatise from South India, chiefly based on the works attributed to Vāgbhaṭa.

Contents

The work consists of three kāṇḍas, the sādharmaṇa-, aṣṭāṅga-, and rasakāṇḍa. The sādharmaṇakāṇḍa contains five chapters (adhikāra): (1) prathamādhikāra, on the three doṣas and their seats, the seven tissues (dhātu) of the body, rasa, vīrya, etc.; (2) dravyaniścayādhikāra, on the properties of foods and medicinal substances; (3) svasthavṛttādhikāra, on the maintenance of health; (4) āturavṛttādhikāra, on the examination of patients and the principles of diagnosis and treatment; (5) prāyaścittādhikāra, on the treatment of diseases by acts of propitiation, etc.¹⁴⁵³ The aṣṭāṅgakāṇḍa has eight chapters: (1) prathamādhikāra, probably concerned with kāyacakitsā; (2) kaumāratantra; (3) bhūtavidyādhikāra; (4) śālākyaçikitsā; (5) sarvaśalyaçikitsā; (6) viṣaçikitsā; (7) rasāyanatantra; (8) vājīkaraṇatantra.¹⁴⁵⁴ The contents of the rasakāṇḍa remain unknown, but are probably based on rasaśāstra texts.

The chapter on śālākyaçikitsā has 724 and that on sarvaśalyaçikitsā 657 verses, mostly śloka, though other metres are also represented.

The chapter on śālākyaçikitsā contains sections on netraroga (1–308), kaṇṇaroga (309–368), nāsāroga (369–392), mukharoga (393–551), and śīroroga (552–724). The chapter on sarvaśalyaçikitsā is subdivided into sections on śopha, vṛṇa and bhagna (1–201), bhagandara (202–241), granthī (242–264), arbuda (265–270), ślīpāda (271–285), gaṇḍamālā and apacī (296–308), kṣudraroga (309–515), dehadaurgandhya and dagdha (489–515), and guhyaroga (516–657). The arrangement of the diseases in these two chapters agrees with that adopted by Vāgbhaṭa in most respects and many verses are taken from his works.¹⁴⁵⁵ The series netra-, kaṇṇa-, nāsa-, mukha- and śīroroga is also found in the Uttarasthāna of Vāgbhaṭa's works. Remarkable, however, is the description of thirteen saṃnipāta fevers in the section on śīroroga (622–673). The names and symptoms of this series, consisting of saṃdhika or saṃdhiga, antakastha,¹⁴⁵⁶ drgdāha or rugdāhaka, citta(vi)bhrama, śītāṅga or śītāgātra, tāndrika,¹⁴⁵⁷ kaṇṭhakubja, kaṇṇika or kaṇṇaka, bhagnanetra¹⁴⁵⁸ or bhugnaḍrś, raktaṣṭhīvin, pralāpaka or pralāpin, jihvaka, and abhinyāsa (622–636), are also met with, in the same order, in the *Yogarātnākara* (160–162), where they are said to be borrowed from some other treatise. The verses on the treatment of these fevers (637–673) also occur in the *Bhāvaprakāśa* (cikitsā 1. 641–694) and *Yogarātnākara* (184–190).

The order in which the diseases are described in the sarvaśalyaçikitsā chapter partially agrees with Vāgbhaṭa, namely from vṛṇa up to the kṣudrarogas. The number of the latter is fifty-five in the *Parahitasamhitā* (515), but only thirty-six in Vāgbhaṭa's

works (A.h.U.31.33; A.s.U.36.31). Their number has been increased by including śītapitta (326; 413–423), amlapitta (327–328; 424–445), masūrikā and sphoṭa (329–344; 446–488), snāyupravṛddhāmaya (345),¹⁴⁵⁹ dehadaurgandhya (a bad body odour), and dagdha (burns) (489–515). The presence of these diseases in the *Parahitasamhitā* indicates that it has been influenced by the *Mādhavanidāna* and Vṛnda's *Siddhayoga* or later works. The guhyarogas, which are said to be forty in number (657), comprise, in the same way as in Vāgbhaṭa's works, all the disorders of the male and female sexual organs. The number of diseases known is indicated in several instances and usually agrees with Vāgbhaṭa.¹⁴⁶⁰

With the exception of Vāgbhaṭa's works, the *Suśrutasaṃhitā*, and the *Rasaratna-samuccaya*,¹⁴⁶¹ nothing is known with certainty about Śrīnāthapaṇḍita's sources.¹⁴⁶² Later authors do not quote him.

Special features

Apart from the peculiarities already referred to, some more features are worthy of mention. The treatment of galagāṇḍa and gaṇḍamālā is dealt with twice, in the śālākya chapter (514–520) and in that on śālya (286–308). That part of the śālya chapter which deals with the kṣudrarogas includes a description of harītakī and its seven varieties, and of āmalakī, vibhītaka, and triphalā (390–412).¹⁴⁶³ At the end of some sections there occur verses on karmavipāka (śālya 199 and 238–241), but this is not a conspicuous element of the *Parahitasamhitā*, while, on the other hand, religious therapy plays a prominent role (śālākya 304–308, 391–392, 547–550, 716–724; śālya 199–201, 238–241, 469–470, 657).

The author

The name of Śrīnāthapaṇḍita appears in the colophon at the end of the śālya chapter, at the end of the last chapter of the aṣṭāṅgakāṇḍa,¹⁴⁶⁴ and at the end of the sādhanākāṇḍa.¹⁴⁶⁵

The name of his work, *Parahitasamhitā*, may refer to the Parahita physicians of Āndhra, though not necessarily so, as the title, which simply means 'saṃhitā promoting the welfare of other (living beings)', may be of the same type as, e.g., *Kalyāṇakāra*.

Members of families of physicians distinguished by the honorific title Parahita are known from four inscriptions: (a) Parahita III of Ātreya gotra, who was the prāṇacārya of Siṅgayanāyaka of Kōrukoṇḍa;¹⁴⁶⁶ (b) Bhāskarārya, son of Parahita, of Kāśyapagotra;¹⁴⁶⁷ (c) Siṅganārya, of Kāśyapagotra, son of Villanārya, grandson of Bhāskarārya and great-grandson of Periyavilla Parahita;¹⁴⁶⁸ (d) Parahita IV, son of Kālanātha Bhaṭṭa.¹⁴⁶⁹

As appears from these inscriptions, there were two of these families, belonging respectively to the Ātreya- and Kāśyapagotra; the one was an older, well-established Telugu family and the other a Drāviḍa family which came from the South, learnt medicine from the already famous Āndhra family, and also adopted the title Parahita, either as a compliment to their preceptors or to gain prestige. In the inscriptions both families claim that an ancestor, Parahita I, treated a serpent that was suffering from a bone stuck in its throat, and that the success of the treatment resulted in this ancestor's being hon-

oured with the name of sarpavyādhicikitsaka.

The author of the *Parahitasamhitā* may have been a descendant of the Parahita families or one of their pupils, though his name does not occur in the inscriptions mentioning Parahita physicians.¹⁴⁷⁰ Arguments for the view that the title Parahita was not reserved for one or more particular families of physicians, but could be given to any physician well versed in all branches of medicine who devoted his life to the practice of his art are given by P. Hymavathi.¹⁴⁷¹

Date

The Madras MS of the *Parahitasamhitā* is written in nandināgarī,¹⁴⁷² a type of script that was in common use during the time of the western Cālukyas, the Redḍī kings of Koṇḍavīḍu¹⁴⁷³ and the earlier dynasties of Vijayanagar rulers; it went out of fashion after the sixteenth century.¹⁴⁷⁴ Hence the MS was copied in the fifteenth or sixteenth century and the text may belong to the fifteenth century. This conclusion is corroborated by the absence of phiraṅgaroga from the *Parahitasamhitā*,¹⁴⁷⁵ a disease described for the first time in the *Bhāvaprakāśa*, which dates from the sixteenth century.¹⁴⁷⁶

Vaṅgasena

Vaṅgasena is the author of a comprehensive textbook,¹⁴⁷⁷ called *Cikitsāsārasaṃgraha*,¹⁴⁷⁸ but often referred to as *Vaṅgasena*¹⁴⁷⁹ after its author. Other titles are *Cikitsā-mahārṇava*,¹⁴⁸⁰ *Cikitsāsaṃgraha*,¹⁴⁸¹ *Cikitsātattvasaṃgraha*,¹⁴⁸² *Vaidyavallabha*,¹⁴⁸³ and *Vaṅgadattavaidyaka*.¹⁴⁸⁴

Contents

Vaṅgasena's treatise contains 11,000–12,000 verses (mostly śloka) and some prose,¹⁴⁸⁵ arranged in ninety-six chapters. The first 124 stanzas are devoted to general subjects, such as definitions of nidāna, pūrvarūpa, rūpa, upaśaya and saṃprāpti (1.9–15), the seasons (1.50–52), the constitutions (1.66–72), the doṣas (1.73–79), weights and measures (1.95–113), patients not to be treated (1.114–117), etc. An (incomplete) table of contents of the work follows (1.125–133). The bulk of the treatise (the remaining part of chapter one and chapters two to seventy-five) are about the diseases and their treatment. This section is followed by chapters on sneha, sveda, vamaṇa, virecana, bastikarman, dhūmapāna, kavala, and nasya, svasthavṛtta, pharmacology, ṛtucaryā, aṣṭa, and definitions of a series of actions of drugs.

The chapters on diseases are arranged by the eight āṅgas: kāya and śālya (sixty-four chapters), śālākya (five chapters), kaumārābhṛtya (two chapters), āgata (one chapter), rasāyana (one chapter), and vājīkaraṇa (one chapter).

The subject matter of the jaladoṣādiyoga chapter is of a remarkable type and does not fit in with this scheme. Besides being concerned with the treatment of disorders caused by polluted water (jaladoṣa), it has some recipes suitable for making women submit to male advances (vaśīkaraṇa), improving the qualities of the sexual organs in males and females, preventing flaccidity of the breasts in women, delaying ejaculation in men, causing sterility or curing it, etc.

The more or less heterogeneous contents of the chapter on rasāyana show a good deal of influence from iatrochemistry; it describes rasāyanayogas for a long series of diseases, treats of śirobasti and the marmans, and enumerates even the nānātmaja diseases.

Vaṅgasena is heavily dependent on Mādhava in the arrangement of the diseases; his verses on nidāna are taken from Mādhava's *Rugviniścaya*,¹⁴⁸⁶ at least for the larger part. This is not to say that almost nothing new is found in Vaṅgasena's nidāna, when compared with Mādhava, for it contains many variants,¹⁴⁸⁷ and its order deviates at many places.¹⁴⁸⁸ More interesting, however, are the numerous stanzas that cannot be traced in Mādhava's work, as well as the new disorders described. Vaṅgasena's therapeutic prescriptions failed to receive much attention,¹⁴⁸⁹ but deserve more study,¹⁴⁹⁰ since a few at least cannot be traced in earlier works.¹⁴⁹¹

The chapters on snehapāna up to that on svasthavṛtta and the chapter on ṛtucaryā are concerned with subjects that follow upon the section on specific therapy in many treatises. Numerous verses in these chapters are taken from Vṛnda's *Siddhayoga* or the *Cakradatta*.

The chapter on dravyaguṇa¹⁴⁹² describes the tastes, etc., the actions of a restricted number of medicinal substances, the best varieties of these, and substitutes to be used in the absence of particular drugs. The gaṇapāṭha chapter enumerates thirty-seven groups of drugs, together with their actions.¹⁴⁹³ The next chapter, based on Caraka,¹⁴⁹⁴ and called saṃśodhanasamśamanarasadravyādinām vargadhikārah, has fourteen groups (varga) of drugs, appropriate for the purpose of saṃśodhana and saṃśamana, or dominated by a particular taste. Three chapters (dhānyavarga, māmśavarga, śākaphalavarga) are about the properties of articles of food. Two chapters (vyāñjanamāmśavyaṇjana and matsyavyaṇjana) are concerned with prepared foods, and one chapter (dravadravya) is about fluids. The next chapter, on aṣṭas, contains mainly material from the *Suśrutasaṃhitā* (Sū.28–33). The last chapter, called dīpanapācanadravyalakṣaṇa, gives definitions of a series of technical terms denoting particular actions of drugs and is the earliest one of this type on the subject.¹⁴⁹⁵ The treatise ends with four verses (vaṅgasenotpatti) on Vaṅgasena's life and work.

Authorities to whom prescriptions are attributed are: the Aśvins,¹⁴⁹⁶ Ātreya,¹⁴⁹⁷ Bhāradvāja,¹⁴⁹⁸ Bhāskara,¹⁴⁹⁹ Girirājaputrī (i.e., Pārvaṭī),¹⁵⁰⁰ Girīśa (i.e., Śiva),¹⁵⁰¹ Idānibhandhacaryā,¹⁵⁰² Kāṅkāyana,¹⁵⁰³ Kāśika,¹⁵⁰⁴ Kāśyapa,¹⁵⁰⁵ Nāgārjuna,¹⁵⁰⁶ Śaṃkara,¹⁵⁰⁷ Siddhanātha,¹⁵⁰⁸ Śrīviśvarūpa,¹⁵⁰⁹ Tārā,¹⁵¹⁰ Vaideha,¹⁵¹¹ Videha,¹⁵¹² and Viṣṇu.¹⁵¹³

Vaṅgasena rarely refers to his sources, but three works of Nāgārjuna are mentioned by name: *Lohaśāstra* (rasāyana 474), *Rasāyanasaṃhitā* (rasāyana 166), and *Yogasāra* (strīroga 91). One formula derives from the *Āśvinasaṃhitā* (gulma 76–78). Hārīta's opinion on a particular subject is once referred to (jvara 502). G. Mukhopadhyaya claims that Vaṅgasena quotes Kapilabala.¹⁵¹⁴

Authors and works quoting from or referring to Vaṅgasena or his work are: the *Ārogyāmṛtabindu*, Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the commentary on the *Āyurvedābhdhisāra*,¹⁵¹⁵ the *Āyurvedīya Khanijavijñāna*, Bhāvamīśra's *Bhāvaprakāśa*¹⁵¹⁶ and its glosses,¹⁵¹⁷ Binod Lal Sen's

Āyurvedavijñāna,¹⁵¹⁸ the *Bṛhadrasarājasundara*, Candrāṭa's *Yogaratanasamuccaya*,¹⁵¹⁹ Devasiṃha Viṭṭhal's *Bṛhadāsavāriṣṭasamgraha*, Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*, Dāhaṇa,¹⁵²⁰ Gopāladāsa, Gulrājśarmamīśra,¹⁵²¹ Hariprapanna in his *Rasayogasāgara*, Hemādri,¹⁵²² Kāśīrāma,¹⁵²³ Māgacandra, Meghamuni's *Meghavinoda*,¹⁵²⁴ Nīścalakara's *Ratnaprabhā*,¹⁵²⁵ the *Pākamārtaṇḍa* and *Pākārṇava*, the *Rasoddhātatantra*, Śrīkaṇṭhadatta,¹⁵²⁶ Śrīvāṇeśvara Bhāṭṭācārya's *Rasaratnādīpikā*,¹⁵²⁷ Sukhānanda's commentary on Lolimbarāja's *Vaidyajīvana*, Trivikrama's *Lauhapradīpa*,¹⁵²⁸ Vaidyarāja's *Sukhabodha*, and the *Yogaratanākara*.¹⁵²⁹

Vaṅgasena's treatise was one of the sources of Āryadāsa Kumārasimha's *Kvāthamaṇimālā*, Viśvanātha Dvivedī's *Rasendrasambhava* and of the *Ma'din al-Šifā'*. It was (anonymously) used as a source by the author of the interpolated portion of Nīścalakara's *Ratnaprabhā*.¹⁵³⁰

Commentaries on Vaṅgasena's work may have been written by Vaidyanātha¹⁵³¹ and Trivikrama.¹⁵³²

Special features¹⁵³³

Vaṅgasena deviates from the *Mādhavanidāna* by inserting stanzas from other sources, splitting up chapters, combining them in new ways, and adding new diseases. Insertions occur especially in the chapters on jvara, netraroḡa, strīroḡa, and bālaroḡa. Vaṅgasena has separate chapters on rājayakṣman and kṣataksaya,¹⁵³⁴ hikkā and śvāsa,¹⁵³⁵ śūla and pariṇāmaśūla,¹⁵³⁶ udāvarta and ānāha,¹⁵³⁷ galagaṇḍa, gaṇḍamālā, granthi, and arbuda.¹⁵³⁸ Mādhava's gynaecological chapters are replaced by one chapter on strīroḡa.

A noteworthy feature is the addition of chapters on bhasmaka, bradhma, and snāyuka, diseases that are not separately dealt with in Vṛnda's *Siddhayoga* and the *Cakradatta*. Vaṅgasena describes the pathogenesis, symptoms and therapy of bhasmaka, a disorder characterized by an excessive activity of the digestive fire.¹⁵³⁹ Bradhma is described together with kuraṇḍa, two disorders with swelling of the inguinal canal and the scrotum as their chief symptom. The verse on bradhma is identical with that on vardhma in Vṛnda's *Siddhayoga* (40.20); kuraṇḍa, said to differ from bradhma in being painless, is added from an unknown source. The treatment of bradhma is the same as that of Vṛnda's vardhma, apart from one extra recipe.¹⁵⁴⁰ Formulae against kuraṇḍa are absent. The characterization of snāyuka is a somewhat expanded version of the description found in the *Siddhayoga* (55.15–17); its treatment, partly the same as in the *Siddhayoga*, is more elaborate.

The description of the disease called urograha, a very painful swelling of the upper and lateral parts of the abdomen, may be the earliest one, unless this disorder was already known to Vāgbhaṭa;¹⁵⁴¹ Vaṅgasena also deals with its treatment.

Worthy of attention is Vaṅgasena's enumeration of the symptoms of five types of splenomegalia (plīthodara; udara 121–127).

The chapter on masūrīkā adds a verse (33) on a variety called kodrava or kakṣāka, originating from kapha and vāta.

Somaroga (strīroḡa 82–85) and the related mūtrāṭisāra (strīroḡa 90) are two disorders recognized for the first time in Vaṅgasena's work, in the chapter on women's

diseases. Somaroga is a polyuria, occurring in women only; when of long standing, it is called mūtrātisāra.¹⁵⁴²

Aversion to sexual intercourse in women (strīvidveṣa or strīdoṣa) is also dealt with in the chapter on women's diseases (prose between 90 and 91); the passages on this group of disorders are quoted from the strīdoṣacikitsāpariccheda of Nāgārjuna's *Yogasāra*. Three types are distinguished, caused respectively by fate (daiva; for example, incompatible horoscopes of husband and wife), an awkward (avidagdhā) husband, and a female rival (sapatnī).¹⁵⁴³ Rituals, sometimes accompanied by the application of drugs, are thought to be helpful in overcoming the woman's resistance; statuettes (putalikā), made of particular substances, homage paid to the Kumārīs, and mantras, are important elements of the rituals described.

Two interesting children's diseases mentioned are paścāttaka (bālaroga 114–119), a vṛāṇa (sore or ulcer) affecting the anal region, probably also known as vicchi, vicchī and vicchinna¹⁵⁴⁴ (bālaroga 120–122), and śayyāmūtraṇa (bālaroga 126–128), enuresis nocturna.¹⁵⁴⁵ The description of the children's disease called upaśīṣaka, omitted in the *Mādhavanidāna*, is borrowed by Vaṅgasena (bālaroga 129) from Vāgbhaṭa.¹⁵⁴⁶ The bad effects of the inauspicious, too early eruption of teeth are dealt with in a series of verses (bālaroga 140–144), followed by the prāyaścitta required in such cases (bālaroga 146–148).

The rasāyana chapter contains a number of recipes which are specifics against particular diseases (262–318). The same chapter describes the marmans (prose between 331 and 332, 332–350) and enumerates the nānātmaja disorders by vāta, pitta and kapha (351–369).

The chapter on aṣṭas has verses on the examination of a patient's eyes (netraparīkṣā 178–186), face (mukhaparīkṣā; 187–188), and tongue (jihvāparīkṣā; 189–192), followed by an elaborate description of the examination of the urine (mūtraparīkṣā; 193–225), which includes, for the first time in Indian medical history, the tailabindu method, in which the form, assumed by a drop of oil on the surface of the urine, has diagnostic and prognostic significance.¹⁵⁴⁷

Vaṅgasena's materia medica is mostly of the common āyurvedic type. He is, however, one of the earliest authors to prescribe *Cannabis sativa* Linn. (bhaṅgā; rājayakṣman 83).¹⁵⁴⁸ Opium is still unknown to him.¹⁵⁴⁹

The stage of development of rasaśāstra in Vaṅgasena's work deserves careful study, having been underestimated previously by J. Jolly,¹⁵⁵⁰ who claimed that the calcination of metals is not mentioned, while metals in general are only infrequently spoken of, though iron is elaborately described, as well as its killing (māraṇa), etc.

Iron and its varieties are indeed described in a detailed way in the chapter on haemorrhoids (arśas 214–241).¹⁵⁵¹ The usual three types of iron are listed: muṇḍa, tīkṣṇa and kānta; muṇḍa has three varieties: mṛdu, kuṇḍa and kaṇḍāra, tīkṣṇa is of six varieties: khara, yogara, sāra, karṇaka, drāvaka and romaka, kānta is divided into seven varieties: huntāla, tāra, vaṭṭa, vājara, kāla, bhrāmaka and cumbaka (arśas 214–225); besides the already mentioned types, pāṇḍija loha is referred to (arśas 229 and 266).

Various other metals are mentioned in the treatise: copper (tāmra) occurs at many places in the chapter on rasāyana (53, 69, 101, 110, 115), lead (nāga) and tin (vaṅga)

are referred to in the same chapter (95). Substances like sulphur (gandhaka), mica (abhraka), etc., are repeatedly prescribed. The killing (māraṇa) of diverse metals, not only iron, was well known to Vaṅgasena (rasāyana 77 and 95). He was also acquainted with a number of processes to which mercury should be subjected before using it medicinally (rasāyana 264 and 287; mūrchanā; 461: śodhana).

Remarkable is the occurrence of the terms yaśada (zinc; rasāyana 326)¹⁵⁵² and śā-nkhadrāva (udara 176–178) in the relatively early work of Vaṅgasena.¹⁵⁵³

Rasayogas are not uncommon among Vaṅgasena's formulae.¹⁵⁵⁴ Elements derived from religion¹⁵⁵⁵ and astrology¹⁵⁵⁶ are repeatedly found in the verses on treatment; mantras are regularly employed; two yantras are described.¹⁵⁵⁷ Tantric practices are referred to.¹⁵⁵⁸

The names of the days of the week are known to Vaṅgasena.¹⁵⁵⁹

The author

Vaṅgasena gives information about himself at the beginning and end of his work. Śiva, Caṇḍī and Sarasvatī are praised in the opening lines, which also provide us with the author's and his father's name, adding that Gadādhara, Vaṅgasena's father, was born in Kāntikā.¹⁵⁶⁰ The vaṅgasenotpatti at the end of Vaṅgasena's treatise opens as follows: "When Śrīkṛṣṇa, who had freed the earth of diseases, had left and had returned to his abode, it became filled with diseases and frightening again in a short time. On seeing this, I was born in the house of Gadādhara¹⁵⁶¹ and made the earth healthy again". It ends with the words: "After being born in the house of Gadādhara, I redacted the work that was called *Agastisamhitā*¹⁵⁶² before my birth. Thereafter it became well known under the name of *Vaṅgasena*. This book, being the quintessence of all the doctrines, will speedily confer success".

The identity of Vaṅgasena's father with one of the persons called Gadādhara who are known from Sanskrit medical literature is a matter of speculation, for information on his literary activity is entirely lacking. It is improbable, on chronological grounds, that Gadādhara, the father of Vaṅgasena, wrote the commentary on the *Suśrutasamhitā* or the *Vaidyaprasāra*, but Vaṅgasena's probable date does at least not conflict with identifying his father with Vaidyagadādhara or Gadādhara vaidya, quoted in Śrī-dharadāsa's *Saduktikarṇāmṛta*, compiled in 1205.¹⁵⁶³

It is commonly assumed that Gadādhara and Vaṅgasena were of Bengal origin.¹⁵⁶⁴

Gadādhara's birthplace has been identified as Kāñjivillī in Rāḍha (Western Bengal)¹⁵⁶⁵ and Kāntinagara of the Muzaffarpur district in Bengal.¹⁵⁶⁶

Apart from the *Cikitsāsārasaṃgraha*, no other works by Vaṅgasena are known.¹⁵⁶⁷

Date

It has long been known that Vaṅgasena cannot be dated later than the first half of the thirteenth century, on account of the dates of some early MSS.¹⁵⁶⁸ J. Jolly claimed that he might have been a contemporary of king Lakṣmaṇasena of the Sena dynasty.¹⁵⁶⁹ P.K. Gode considered him to have lived in the twelfth century at the latest, basing this view on quotations from Vaṅgasena in Hemādri's commentary on the *Aṣṭāṅghṛdayasamhitā*.¹⁵⁷⁰ As Hemādri lived in the second half of the thirteenth

century and P.K. Gode assumed a rather long interval of seventy-five years between the two, his conclusion was rejected by N.N. Das Gupta¹⁵⁷¹ and H.V. Trivedi,¹⁵⁷² who placed Vaṅgasena in the thirteenth century. D. Ch. Bhattacharyya discovered later that the *Vaṅgasenasamgraha* is quoted by Niścalakara,¹⁵⁷³ which lowers the date to the period before A.D. 1150–1200.¹⁵⁷⁴ Vaṅgasena is assigned to the period 950–1050 by Rām Kumār Rāy and Rājiv Kumār Rāy.¹⁵⁷⁵

Evidence concerning Vaṅgasena's chronological position is, as appears from the foregoing, of diverse kinds. Apart from the early MSS, which remain valuable testimonies, it derives from the text of his treatise and quotations from it in later treatises. The contents of the *Cikitsāsārasamgraha* show that Vaṅgasena was posterior to Mādhava, the author of the *Rugviniścaya*, which work he largely utilized, and Vṛnda, from whose *Siddhayoga* he borrowed. The common assumption that Vaṅgasena took many recipes from Cakrapāṇidatta's *Cikitsāsamgraha*,¹⁵⁷⁶ although still to be tested, appears to be acceptable.¹⁵⁷⁷

The sources specified by Vaṅgasena are of no avail in fixing his date. The rather developed state of rasaśāstra prohibits placing Vaṅgasena earlier than Cakrapāṇidatta, while the absence of the examination of the pulse as a diagnostic tool forces us to regard him as earlier than Śārṅgadharā.

A particular piece of internal evidence, namely the attribution of a formula to Śrī-*viśvarūpa*,¹⁵⁷⁸ led P.V. Sharma to date Vaṅgasena in the reign of king Viśvarūpasena of the Sena dynasty, who acceded to the throne in A.D. 1205¹⁵⁷⁹ or 1206.¹⁵⁸⁰ This view is, however, contradicted by the early date of some quotations from Vaṅgasena,¹⁵⁸¹ which are of considerable value in determining Vaṅgasena's terminus ante quem. Those found in Hemādri point to a date earlier than the second half of the thirteenth century; the single quotation in Daḥaṇa's commentary on the *Suśrutasamhitā* lowers the limit to about A.D. 1200, and, finally, the quotation in Niścalakara's *Ratnaprabhā* enables to conclude that Vaṅgasena lived in the period A.D. 1050–1100.¹⁵⁸²

Vatseśvara

Vatseśvara wrote the *Cikitsāsāgara*,¹⁵⁸³ a compilation, which refers to the *Agnipurāṇa*, *Garuḍapurāṇa*, and *Suśruta* as sources. At the beginning of the work the author gives his geneology: he was the son of Deveśvara, son of Horeśvara, son of Bhūddharadatta, the younger brother of Vireśvara, and, like the latter, a son of Devāditya. Vatseśvara held, like the members of his family mentioned by him, the position of a minister at a royal court.¹⁵⁸⁴

Vireśvara's son Caṇḍeśvara, Vatseśvara's great-uncle, was a well-known dharma-śāstrin, who served king Harasiṃhadeva of Mithilā, and who, in A.D. 1314, gave away his weight in gold on the banks of the river Vāgvatī (the modern Bagmati) in Nepal.¹⁵⁸⁵

Being of the generation of Caṇḍeśvara's grandchildren, Vatseśvara flourished about A.D. 1360.¹⁵⁸⁶

Vīrasimha

The *Vīrasimhāvaloka*¹⁵⁸⁷ by Vīrasimha is a treatise which describes the aetiology and therapy of each group of diseases in three entirely different ways, according to the principles of astrology,¹⁵⁸⁸ karmavipāka, and medicine.

Contents

The work is written in a mixture of verse and prose, the latter being chiefly found in the parts dealing with astrology and karmavipāka. After two introductory verses and some introductory prose, the author gives a list of the diseases that will be dealt with. Their order agrees with the *Mādhavanidāna*, apart from the following alterations and additions. A chapter on jvarātisāra has been added after that on jvara, one on mahomāda after that on pānātyaya,¹⁵⁸⁹ and one on vardhma after that on antravṛṣa-*namuṣkaroga*.¹⁵⁹⁰ The chapter on kṣudrarogas is divided into two parts, the first of which is concerned with a short series of these disorders and their treatment, along the lines of books on karmavipāka: valmīka, jvālāgardabha,¹⁵⁹¹ pāṣāṇagardabha, carmakīla or kīlakavraṇa, vaikṛtyaroga¹⁵⁹² and avijñātaroga.¹⁵⁹³ The second part is about the medical treatment of thirty-four kṣudrarogas. The chapter on yonivyāpad is followed by one on garbharakṣā, describing the measures to be taken during the ten months of pregnancy, and the treatment of disorders of lactation. The chapter on strīroga is concerned with stanasphoṭa,¹⁵⁹⁴ mūḍhagarbha and yonikanda. Chapters on bālaroga and viṣa end that part of the treatise which is arranged in agreement with the *Mādhavanidāna*.

Eleven more chapters follow, not listed in the table of contents at the beginning of the work; they are about rasāyana, vājikaraṇa, sneha, sveda, vamaṇa, vireka, anuvā-sana, nirūha, dhūma, nasya, and kavala. The treatise ends with a miśraṇa chapter, enumerating the best medicine in each disorder and describing weights and measures. At the end the author gives some information about himself.

The composition of the *Vīrasimhāvaloka* is somewhat uneven. Its sections on astrology and karmavipāka precede those devoted to medicine in its strict sense, and appear to be regarded as more important than the latter.¹⁵⁹⁵ Therapy was a greater concern of the author than nidāna. His chief source regarding therapy was Vṛnda's *Siddhayoga*, while most verses on nidāna were taken from Mādhava's *Rugviniścaya*, though these are sometimes interspersed with verses of unknown origin.¹⁵⁹⁶

Vīrasimha specifies his sources in many instances. The following works and authors are quoted or referred to: *Ārogyacintāmaṇi* (47),¹⁵⁹⁷ *Bārhaspatya* (189), *Baudhāyana* (many times), *Bheda* (128), *Brahmagītā* (36),¹⁵⁹⁸ *Brahmaṇḍapurāṇa* (65, 101, 119, 163, 238, 260, 262, 294), *Brahmapurāṇa* (239), *Caraka* (17, 74, 110, 162, 294), *Cikitsākalikā*¹⁵⁹⁹ (72),¹⁶⁰⁰ *Dāmodara* (47), *Gārgya* (4), *Garuḍapurāṇa* (59), *Gautama* (32, 210), *Gautamīya* (256), *Hārīta* (2, 75), *Jātaka* (many times), *Kalikā*¹⁶⁰¹ (26, 1602 38, 1603 72, 111),¹⁶⁰⁴ *Kalyāṇakāraka* (117), *Kātyāyana* (238), *Kūrmapurāṇa* (260), *Līṅgapurāṇa* (221), *Mahābhārata* (66, 78, 119, 219), *Mahādevabhāṣya* (277), *Maheśvaratantra* (4),¹⁶⁰⁵ *Mānava* (189), *Nāradyapurāṇa* (273), *Nāradyavacana* (190), *Padmapurāṇa* (27, 32, 36, 64, 94, 152, 174, 201, 261), *Pitāmahasamhitā* (279),

Rgvidhāna (43, 238), *Rugviniścaya* (many times), *Śaṃkaragītāh* (119), *Sārāvalī* (2, 27, 31), *Śātātapīya Karmavipākā* (91), *Śaunaka* (51–53), *Śivagītā* (32), *Śrīpati* (27, 32, 36, 58, 91, 289), *Suśruta* (6, 42, 60, 69, 84, 86, 93, 95, 97, 102, 164, 253, 256, 274), *Triśāthācārya* (7–9),¹⁶⁰⁶ *Umāmaheśvarasaṃvāda* (77, 101, 118), *Vācaspati* (118),¹⁶⁰⁷ *Vāgbhaṭa* (21, 23, 35), *Vārāha* (209), *Vāyupurāṇa* (79, 119, 158, 166, 217, 273, 278), *Viṣṇu* (184, 239), *Vṛddhabaudhāyana* (179–210), *Vṛddhagautama* (53, 166), *Vṛddhaparāśara* (43), *Vṛndasaṃgraha* (many times), and *Yogarātnāvalī* (48).¹⁶⁰⁸

The *Vīrasimhāvaloka* is quoted by Devasiṃha Viṭṭhal in his *Bṛhadāsavāriṣṭasamgraha*, Karandīkar in his *Nidānadīpikā*,¹⁶⁰⁹ Meghamuni in his *Meghavinoda*,¹⁶¹⁰ Trimalla in his *Yogatarāṅgiṇī*, and in the *Yogarātnākara*; it was probably used by Śāringadhara in the composition of his *Triśatī*.

Special features

Unusual names of diseases mentioned in this work are mahomnāda (100–101), vaikṛtyaroga (239), avijñātaroga (239), and stanasphoṭa (288–289). Thirty-four kṣudrarogas are mentioned (239–244), whereas their number is thirty-six in the works ascribed to Vāgbhaṭa, forty-four in the *Suśrutasaṃhitā* and *Mādhavanidāna*.

The author

At the end of the work the author, who calls himself a lion among the kings, mentions that his name is Vīrasimha and that he is of Tomara lineage. His father was Devavarman and his grandfather Kamalasiṃha.

The Tomaras were a Rājput clan who founded a dynasty in Gwalior in 1375.¹⁶¹¹

Vīrasimha dictated his treatise to a kāyastha named Sāraṅga.¹⁶¹²

Two more works by an author called Vīrasimha are an *Āyurveda*¹⁶¹³ and the *Nṛsimhodaya*.¹⁶¹⁴

The author of the *Vīrasimhāvaloka* is sometimes credited with the *Durgābhaktitarāṅgiṇī*.¹⁶¹⁵

Date

The *Vīrasimhāvaloka* was completed in A.D. 1383.¹⁶¹⁶

Viśvanātha

Viśvanātha was the author of the *Pathyāpathyaviniścaya*¹⁶¹⁷ or *-vinirṇaya*¹⁶¹⁸ and the *Cikitsārpava*.¹⁶¹⁹

(1) Pathyāpathyaviniścaya.¹⁶²⁰

After a maṅgala addressed to Śiva and some stanzas which introduce its subject, this treatise, consisting of 611 verses, enumerates which substances are beneficial or harmful in a series of diseases (9–556) and in the six seasons (557–583). Towards the end, after some verses on basic principles of therapy, it mentions the disorders dealt with in the work (587–594). An appendix (pariśiṣṭa) is concerned with the actions of the

tastes and the effects of overindulgence in substances with a particular taste (595–607); it concludes with some general verses (608–610). The book ends with information on the author (611).

Mādhava's arrangement of the diseases is for the greater part adopted. The remedial measures and medicinal substances mentioned by Viśvanātha are almost completely of a classical āyurvedic type. Musk is known to him.¹⁶²¹ Opium is not prescribed. Cannabis may form part of Viśvanātha's materia medica.¹⁶²²

The verses on jvara mention taruṇa- (9 and 12–13), madhyama- (14–16), and purāṇajvara (31–34); those on atisāra refer to jvarātisāra (58–59). Homage to Śiva is recommended in insanity caused by devas, etc. (232). The disorders called bradhma and vṛddhi are mentioned together (373–377). Remedial measures of a religious nature are not referred to in the verses on masūrikā (459–464). The verses on gynaecology and obstetrics are arranged around the following subjects: pradara and yonivyāpad (495–407), pregnancy (498–507), and puerperal diseases (sūtikārōga, 508–517). Viṣaroga is followed by verses on mixtures of diseases (rogasaṃkara, 531–532), vātaroga (533–543), pittaroga (544–550), and kapharoga (551–556). Surgical measures, especially cautery (dāha)¹⁶²³ and venesection,¹⁶²⁴ are frequently recommended. The tailadronī is twice referred to.

Worthy of notice are the following words: pacelima (16; 180); rotikā (a kind of bread; 24); names of plants like kañicaṭa (68; 120), methī (94), and peṭī (191; 214; 239; 253); names of fishes such as bhāṅkura (536), ceṅga (172), ḍiṇḍiśa (51), gargara (249; 536), illiśa (172; 249), kavayī (172; 249), khaliśa (68), khuḍḍiśa (68; 250), madhurālikā (51; 68; 172), parvata (249), proṣṭī (172), rohita (250), śilīndhra (249), śṛṅgin (250), toḍimatsya (48), varmī (250), and the word for shrimp, ciṅgaṭa (118).

Geographical names found in the work are Mahendragiri (363), Pāriyātra (389), and Sahyādri (436).

(2) No details are available on Viśvanātha's second work, the *Cikitsārpava*.¹⁶²⁵

The author

Viśvanātha¹⁶²⁶ mentions at the end of his *Pathyāpathyaviniścaya* (611) that he was a great-grandson of Umāpati, grandson of Tapanā,¹⁶²⁷ who was a leading poet and physician, and son of Gaurīnarasiṃhasena.¹⁶²⁸

Date

Viśvanātha is said to have written his *Pathyāpatha* at the court of Pratāparudra, the Gaṇapati king of Orissa¹⁶²⁹ (A.D. 1497–1540),¹⁶³⁰ who was a contemporary and disciple of Caitanya (A.D. 1486–1533), one of the mediaeval Vaiṣṇava saints of India.¹⁶³¹

The *Mahārṇava* or *Madanamahārṇava* compiled by Viśveśvarabhaṭṭa

The *Mahārṇava* or *Madanamahārṇava*,¹⁶³² attributed to Māndhātara,¹⁶³³ son of Madanapāla,¹⁶³⁴ was actually compiled by Viśveśvarabhaṭṭa.¹⁶³⁵

Contents

This large treatise, in a mixture of verse and prose, arranged in forty chapters (taraṅga), ¹⁶³⁶ is a compilation ¹⁶³⁷ which deals exclusively with karmavipāka, the retribution of acts committed in former existences, a subject that belongs rather to dharmasāstra than to medicine, ¹⁶³⁸ although it is sometimes dealt with in medical treatises. Remedial actions of a religious nature (prāyaścitta, dāna, homa, bali, stotra, mantra, etc.) against a long series of diseases are described in that context (chapters eight to forty). ¹⁶³⁹

Illness is divided into three types: arising from karman, from the doṣas, and from the combined actions of these two. ¹⁶⁴⁰ Diseases arising from bad karman are of three types again: resulting from mahāpātaka or mahāpāpa, upapāpa, and pāpa, lasting respectively during seven, five and three successive births; mahāpāpa gives rise to kuṣṭha, rājayakṣman, prameha, grahaṇī, mūtrakṛcchra, aśmarī, kāsa, atisāra, bhagandara, duṣṭavraṇa, gaṇḍamālā, pakṣaghāta, and akṣināśana, upapāpa to jalodara, yakṛt, plīhan, śūla, śopha, vraṇa, śvāsa, ajīrṇa, jvara, chardi, bhrama, moha, galagraha, raktārbuda, and visarpa, pāpa to valmīka, puṇḍarīka, etc. ¹⁶⁴¹

The *Mahārṇava* is quoted by Allāḍanātha, ¹⁶⁴² Raghunandana in his *Kṛtyatatva*, ¹⁶⁴³ Śrīnātha, and others. ¹⁶⁴⁴

Special features

Several varieties of śūla (chapter nine), vraṇa (chapter fifteen) and sphoṭa (chapter fifteen) are mentioned; the term gunma is used instead of gulma (chapter twenty-seven); lūtakitva (chapter thirty-six) may designate a disorder related to lūtāvraṇa; unusual types of kuṣṭha are referred to (chapter thirty-seven): hīna-, rakta-, pīta-, gunma-, kṛṣṇa-, kaṭi-, netra-, and śvetakuṣṭha; ākasmikakārsya is mentioned (chapter thirty-nine); many grahas are enumerated which are for the greater part not met with elsewhere (chapter forty): prajā-, jvara-, pratunḍa-, kāmila-, kālanāyaka-, piṭṛ-, lokāyata-, āpastamba-, vṛtra-, mahājvara-, kumbhaka- or jambhaka-, kapila-, śivapāda-, ūrdhvakeśi-, viṣṭambha- or vivṛtākṣa-, mahājīhvā-, nava-, vāsava- or vāyasa-, kṣetrapāla-, acala-, hastipāda-, karṇa-, dhana-, avatola-, kṛṣa- or śaśi-, skanda-, skandāpasmāra-, śīśu-, and meṣagraha.

The author

Viśveśvara, of Kauśīkagotra, was the son of Pedibhaṭṭa ¹⁶⁴⁵ and Ambikā, and a pupil of Vyāsaraṇyamuni. Originating from Southern India, as appears from his father's name, he migrated to Northern India in search of patronage. Viśveśvara won the admiration of the Reddī kings and was the poet laureate of the Recarī king Siṅgabhūpāla (A.D. 1386–1412), according to P. Hymavathi. ¹⁶⁴⁶ He is regarded as one of the leading authorities of the Benares school of modern Hindu Law. ¹⁶⁴⁷

Date

The *Mahārṇava* probably dates from 1360–1390, i.e., the period of Viśveśvarabhaṭṭa's literary activity. ¹⁶⁴⁸

Vopadeva

Vopadeva ¹⁶⁴⁹ was the author of at least three medical works: ¹⁶⁵⁰ (1) *Siddhamantraprakāśa*, ¹⁶⁵¹ a commentary on his father's *Siddhamantra*; (2) *Hṛdayadīpikā*, ¹⁶⁵² a nighaṇṭu; (3) *Śataślokī*, ¹⁶⁵³ a collection of recipes accompanied by an auto-commentary, the *Candrakalā*. ¹⁶⁵⁴

A commentary on the *Śārṅgadharasamhitā*, called *Gūḍhārthadīpikā*, commonly ascribed to Vopadeva ¹⁶⁵⁵ on the authority of Weber ¹⁶⁵⁶ and Aufrecht, ¹⁶⁵⁷ is not his work, for its text, as recorded by Weber, is identical with Kāśīrāma's *Gūḍhārthadīpikā* on the *Śārṅgadharasamhitā*. ¹⁶⁵⁸

Vopadeva was a prolific author, who also produced treatises on grammar (*Kavikalpadruma* with an auto-commentary called *Kāvyakāmadhenu*; *Mugdhabodha*), on dharmasāstra (*Triṃśacchlokī*; *Paraśurāmapratāpāṭikā*), and on the *Bhāgavatapurāṇa* (*Harilīlā*, an abstract of this Purāṇa; *Muktāphala*, a summary of its teaching), etc. ¹⁶⁵⁹ His versatility is revealed by a verse at the end of the *Muktāphala*, in which he claims to have composed ten works on grammar, nine on medicine, one on tithinirdhāra (i.e., jyotiṣa), three on sāhitya, and three on the *Bhāgavatapurāṇa*. ¹⁶⁶⁰ Even the *Bhāgavatapurāṇa* itself has been attributed to Vopadeva. ¹⁶⁶¹

(1) The *Siddhamantraprakāśa* is an elaborate and valuable commentary. ¹⁶⁶² Its exposition on the terms rasa, vipāka, vīrya, and prabhāva ¹⁶⁶³ is theoretically important, amongst other things on account of the view that the effect of prabhāva is not due to natural factors inherent in a medicinal substance (svābhāvika-bala), but to an extra, especially conditioned factor (aupādhika-bala). Noteworthy is also the digression on the term udāsīna ¹⁶⁶⁴ (i.e., neutral with respect to the doṣas), used by Keśava in order to harmonize mutually conflicting statements of Caraka, Suśruta, and Khārāṇādi. Vopadeva declares that only the works of Caraka, Suśruta, and Vāgbhaṭa can be accepted as authoritative, due to their completeness, the continuity of their tradition, and the scholarly commentaries available. ¹⁶⁶⁵ The identity of plants, animals, etc., enumerated by Keśava, is elucidated by his son by means of synonyms and, rather frequently, by vivid descriptions based on morphological and other characteristics, ¹⁶⁶⁶ which enhances the value of this remarkable work.

Though many earlier treatises consulted by Vopadeva are quoted by name, it remains difficult to assess who were his foremost authorities. P.V. Sharma demonstrated that Dalhapa's *Nibandhasamgraha* comes first, followed by the *Aṣṭāṅganighaṇṭu* and Cakrapāṇidatta's *Āyurvedadīpikā*. ¹⁶⁶⁷

Vopadeva quotes the commentaries of Hariścandra and Jejjāta. Other authorities and works cited are: Amara, Asaṃkara, ¹⁶⁶⁸ Bāṣpacandra, Hārīta, ¹⁶⁶⁹ Khārāṇādi, Mādhava, ¹⁶⁷⁰ Nala, ¹⁶⁷¹ Rāghava, and Rudrabhaṭṭa or Rudraṭa, ¹⁶⁷² as well as a *Kārttikeyapurāṇa* and a *sūdaśāstra*. ¹⁶⁷³

The *Siddhamantraprakāśa* is quoted in Priyavrat Śarmā's auto-commentary on the *Dravyagunāsūtra* and Śivadatta's auto-commentary on the *Śivakoṣa*. ¹⁶⁷⁴

(2) The *Hṛdayadīpaka*, called a nighaṇṭu by the author himself,¹⁶⁷⁵ was written in order to clarify the medicinal substances occurring in *Svalpavāgbhaṭa*¹⁶⁷⁶ and other works,¹⁶⁷⁷ which calls to mind Vāgbhaṭa's prominent position as an authority for Vopadeva.

The work consists of 176 verses in a variety of metres (the anuṣṭubh predominating), arranged in eight vargas, and presents mostly names of drugs. The arrangement of the subject matter resembles that of the *Paryāyaratnamālā*.

Vargas one to four treat of substances the synonyms of which can be arranged in four (catuṣpādavarga), three (tripādavarga), two pādas (dvipādavarga) or one pāda (ekapādavarga); vargas five and six enumerate drugs with two names (dvināmavarga) or one name (ekānāmavarga); varga seven (nānārthavarga) forms the homonymic section; varga eight (miśrakavarga), of a heterogeneous character, is concerned with articles of diet, medicinal preparations, nosological terms, pañcakarman, paribhāṣā, etc.

Vopadeva's descriptions are sometimes similar to those of the *Amarakoṣa*.¹⁶⁷⁸ Some of Vopadeva's drugs are absent from the *Bṛhatṭrayī*, e.g., asthisamhāra (75), babbūla (128), hijjala (127), and jalakanda (111).

The *Hṛdayadīpaka* is quoted by Raghunātha in his *Bhojanakutūhala* and Śivadatta in the auto-commentary on his *Śivakoṣa*.¹⁶⁷⁹

A supplement to the *Hṛdayadīpaka*, called *Paripūrti*, was written by Nāganātha.¹⁶⁸⁰

(3) The *Śataśloki* counts 101 verses in various long metres. Apart from the introductory and closing lines there are ninety-six stanzas describing well-known formulae, which are divided into six adhikāras of sixteen verses each, devoted to six types of preparation, namely cūrṇa, guṭikā, leha, ghr̥ta, taila, and kvātha.

The *Śataśloki* is provided with a commentary by Vopadeva himself, called *Candrakalā*, as indicated by the author at the end of his work.¹⁶⁸¹ This commentary gives synonyms of the substances going into a compound medicine and specifications about the way to prepare it. Another commentary, written by Veṇīdatta, son of Bhogin, grandson of Vāsudeva, is called *Bhāvārthadīpikā*.¹⁶⁸² A Hindi commentary (stabaka) on the *Śataśloki* was composed in Pālī in Mārvār, in 1774/75, by Rāma vijaya Upādhyāya, pupil of Dayāsiṃha of the Kharataragaccha.¹⁶⁸³ Another Jain monk, Cainsukha of the Kharataragaccha, pupil of Lābhanidhāna, wrote, in A.D. 1763/64, a commentary on it in Rājasthānī.¹⁶⁸⁴

Vopadeva's *Candrakalā* is referred to by Śivadāsa in his commentary on the *Cakradatta*.¹⁶⁸⁵ The *Śataśloki* is quoted by Kāśīrāma in his commentary on the *Śārngadharasaṃhitā*¹⁶⁸⁶ and in the *Yogarātnākara*.¹⁶⁸⁷ Vopadeva is referred to in Śailendrasīṃha's *Vaidyacintāmaṇibhaiṣajyasamgrahaya*.¹⁶⁸⁸ Unspecified works of Vopadeva are quoted in Hārāṇacandra's commentary on the *Suśrutasaṃhitā*, Kāśīrāma's commentary on the *Śārngadharasaṃhitā*,¹⁶⁸⁹ Narahari's *Vāgbhaṭamaṇḍana*,¹⁶⁹⁰ and the *Tāmbūlamañjarī*.

The author

Vopadeva was the son of Keśava and the pupil of Dhaneśa;¹⁶⁹¹ he lived, as his father did, in Vedapada.¹⁶⁹² He was a paṇḍit to the Yādava king Mahādeva (1260–1271) and a friend of Hemādri.¹⁶⁹³ The close association between Vopadeva and Hemādri is attested by the latter's commentaries on Vopadeva's *Muktāphala* and *Harilīlā*.¹⁶⁹⁴ Vopadeva wrote his *Harilīlā* and *Muktāphala* at the request of Hemādri¹⁶⁹⁵ and may also have composed a biography of the latter in the last phase of his life.¹⁶⁹⁶ Hemādri shared Vopadeva's predilection for Vāgbhaṭa and was the author of a commentary on the *Aṣṭāṅgahṛdayasaṃhitā*.

Date

Vopadeva's association with the court of Mahādeva proves that he lived in the second half of the thirteenth century.¹⁶⁹⁷

Part 8

Authors and works from the 16th
to the 20th centuries

Chapter 1 Sixteenth-century authors and works

Ānandabhārati Yatiṇdra

Ānandabhārati Yatiṇdra, also called Ānanda(bhārati)siddha and Yogasiddha, pupil of Nṛsiṃhabhārati, was the author of a work known as *Ānandamālā*(*rasasāra*) or *Ānandamālikā*; this work is also referred to under the titles *Vaidyakasārasaṃgraha*, *Yogajñāna*, *Yogamālā*, and *Yogaśāstra*.¹

The full extent of this treatise is not known and the order of the chapters varies in the MSS. Subjects dealt with in one of the MSS² are: kvātha, rasa, cūrṇa, guṭikā, pralepa, avaleha, āsava, ghrta, taila, añjana, dhātuśodhanamāraṇa, virecana, and nakṣatrarogagaṇanā. Another MS,³ described as chiefly concerned with rasayogas, takes into consideration other types of medicines too.⁴

Caraka, Suśruta and the *Rasaratnākara* are referred to.⁵

The *Ānandamālā* is quoted in Ananta's *Pratāpakalpadruma*, Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*, and an anonymous *Pākārṇava*.

The author and his date

Ānandabhārati's name informs us that he was a monk of the Daśanāmī order.⁶ Both Ānandabhārati and his teacher Nṛsiṃhabhārati are called paramahamṣaparivrajakācārya.⁷

The period in which Ānandabhārati lived is elucidated by the references to the *Rasaratnākara*, dating from the first half of the fifteenth century, and the date of one of the BORI MSS of the *Ānandamālā*, A.D. 1660.⁸ Nṛsiṃhabhārati, the guru of Ānandabhārati, has tentatively been identified by P.K. Gode⁹ as the person of that name who was also the preceptor of Durvāsabhārati¹⁰ and Viśvarūpabhārati.¹¹ Nṛsiṃhabhārati can be assigned to the period 1475–1550, which establishes that Ānandabhārati must have written his work in the earlier part of the sixteenth century.

Bhāvamiśra

Bhāvamiśra¹² was the author of (1) the *Bhāvaprakāśa*, (2) the *Guṇaratnamālā*, and (3) a commentary on the *Mādhavanidāna*.¹³

The Bhāvaprakāśa

(1) The *Bhāvaprakāśa*^{14,15} is a voluminous compilation of an encyclopaedic character that belongs to the smaller authoritative triad called *Laghubhūṭayā*.¹⁶ It consists of three

khaṇḍas and a nighaṇṭu. The first khaṇḍa is divided into a first part (1,157 verses) which has six prakaraṇas, the nighaṇṭu (2,062 verses), and a second part (1,025 verses) that forms the seventh prakaraṇa.

Prakaraṇa one contains Bhāvamīśra's version of the descent of āyurveda, a version that differs in some respects from its parallels in the *Caraka-* and *Suśrutasaṃhitā*. It is not Bharadvāja who goes first to the abode of Indra and receives the āyurveda, but Ātreya, followed later by Bharadvāja;¹⁷ Caraka figures in the story as an incarnation of Śeṣa,¹⁸ born on earth in order to free mankind from diseases; his saṃhitā is said to be based on the works of the six disciples of Ātreya. Dhanvantari also receives the āyurveda from Indra and is, on the latter's request, born as Divodāsa, king of Kāśī; Viśvāmītra and other sages, recognizing Divodāsa as an incarnation of Dhanvantari, send their sons to him for instruction; after completing their studies, these sons return home; Suśruta, the son of Viśvāmītra, is the first among them to write a tantra.

Prakaraṇa two is a condensed version of the Sāṃkhya philosophy in its classical form. Prakaraṇa three is concerned with embryology and anatomy; the doṣas, dhātus, marmans, etc., are also dealt with. Prakaraṇa four is about the care for a newborn child and about the constitutions. Prakaraṇa five forms a long and detailed description of svasthavṛtta (dinacaryā, rātricaryā, ṛtucaryā). Prakaraṇa six (mīśraprakaraṇa) deals, as its name suggests, with various subjects: types of diseases, the four pillars of treatment (catuṣpād), rules for the collection and inspection of drugs, substitutes for particular drugs, the qualities and effects of the tastes, definitions of various effects of drugs, definitions of vīrya, vipāka and prabhāva.

The *Bhāvaprakāśanighaṇṭu*¹⁹ is arranged in twenty-three groups (varga) of substances: haritakyādi (1), karpūrādi (2), guḍūcyādi (3), puṣpa (4), vaṭādi (5), āmrādi (6), dhātuvādi (7), dhānya (8), śāka (9), māṃsa (10), kṛtānna (11), vāri (12), dugdha (13), dadhi (14), takra (15), navaṇīta (16), gṛṛta (17), mūtra (18), taila (19), saṃdhāna (20), madhu (21), ikṣu (22), and anekārtha (23).

The seventh prakaraṇa is subdivided into seven parts which deal respectively with weights and measures (1), rules for various pharmaceutical preparations (2), the śodhana and māraṇa of the dhātus, the yantras, the śodhana and māraṇa of the upadhātus, some saṃskāras for the preparation of mercurial compounds, the preparation of rasakarpūra and sindūrarasa, the śodhana and māraṇa of the uparasas and ratnas, the viṣas and upaviṣas (3), snehapāna (4), pañcakarman (5), dhūmapāna, gaṇḍūṣa, etc. (6), and rogiparīkṣā (7).

The second (5,883 verses) and third (95 verses) khaṇḍa form together the eighth prakaraṇa on therapy (cikitsā), divided into seventy-three chapters, for the major part in the order of the *Mādhavanidāna*. Deviations from this order and additions are: a separate chapter on jvarātisāra (3), the unusual position of the chapter on amlapitta and śleṣmapitta (10) between raktapitta and rājayakṣman, separate chapters on pittavyādhi (27) and śleṣmavyādhi (28) between āmavāta and vātarakta, a separate chapter on plīhayakṛdroga (33) between gulma and hṛdroga, and on kārśya (40) after sthauilya (= medoroga), the description of bradhma in the chapter on vṛddhi (43), a separate chapter on līṅgārśas (52) between upadāṃśa and śūkaḍoṣa, on snāyuroga (57) between visarpa and visphoṭaka, and on phiraṅgaroga (59) after visphoṭaka, the description of śītalā in

the chapter on masūrīkā (60), a separate chapter on somaroga and mūtrātisāra (69) between stīroga and yoniroga, the description of yonikanda in the chapter on yoniroga (70), and the addition of two chapters on vājīkaraṇa (72) and rasāyana (73), which form together the third khaṇḍa.

The chapters on therapy begin with verses on nidāna which are largely taken from Mādhava's *Rugviniścaya*; verses from other sources have been added rather frequently. The verses on treatment give precedence to āyurvedic prescriptions, which are followed by iatrochemical formulae (rasayogas).²⁰

Authorities referred to in the text of the treatise itself are: Agniveśa (73.140–143; cikitsā 1.762), Bhairavānanda (cikitsā 72.29–30),²¹ Candramauli (3.18),²² Caraka (*Nighaṇṭu*, dhānyavarga 40), Dhanvantari (3.325; 4.5) Hārīta (*Nighaṇṭu*, vāri 75–76; cikitsā 54.137–141),²³ Jaijāṭa (*Nighaṇṭu*, dugdha 32), and Suśruta (3.65; *Nighaṇṭu*, dhānyavarga 40).

Sources mentioned in ed. m are: Agniveśa (cikitsā 1.762), Ātreya (cikitsā 1.30), *Cakradatta* (cikitsā 1.26 and 245; 24.265–272), Caraka (passim), Dhanvantari (cikitsā 1.272), Hārīta (73.139; cikitsā 1.19–20), *Kāśīkhaṇḍa* (cikitsā 60.70–82), Kāśyapa (cikitsā 6.30), *Rasāmṛta* (73.199), *Rasapradīpa* (73.21–24; cikitsā 1.579–581 and 582–586), *Rasaratnapradīpa* (cikitsā 1.191–192 and 612–615; 6.95–98), *Rasendracintāmaṇi* (cikitsā 1.587–588 and 608–611; 6.90–94; 11.81–85), *Ratnamālā*²⁴ (*Nighaṇṭu*, dhātuvādi 188), Śārṅgadhara (3.212; cikitsā 11.86–90), Suśruta (passim), Vāgbhaṭa (passim), *Vṛddhasuśruta* (*Nighaṇṭu*, dhātuvādi 168–169), Viśvāmītra (cikitsā 71.139), *Vṛddhasuśruta* (*Nighaṇṭu*, vāri 65–67; cikitsā 1.78), *Vṛddhavāgbhaṭa* (5.10–11), and *Vṛndaṭīkā* (cikitsā 1.235–236 and 249–251).

Sources mentioned in the glosses (tippanī) of ed. m are: Amara (73.27; cikitsā 1.245 and 671; 2.5; 24.20), Amarasiṃha (6.13; cikitsā 1.660; 24.75; 71.140–141), Bhoja (3.146 and 178; 5.317; cikitsā 19.14; 46.19; 54.28 and 46; 66.29), *Cakradatta* (cikitsā 1.93 and 99), Caraka (passim), Dhanvantari (cikitsā 1.208), *Dhanvantarinighaṇṭu* (cikitsā 1.93; 5.63; 43.35; 44.32), *Dravyaguṇagrantha* (cikitsā 1.684),²⁵ *Drḍhabala* (cikitsā 1.440–444), *Gadādhara* (cikitsā 1.119 and 440–444; 63.52), *Gayadāsa* (3.146; cikitsā 32.5; 34.2), *Guṇaratnamālā* (cikitsā 24.1–2), Hārīta (cikitsā 1.30, 99, 401 and 541; 46.18), Jaijāṭa (cikitsā 1.734–735), *Jatūkarna* (cikitsā 1.98), *Jejjāṭa* (cikitsā 1.9; 6.32; 24.215–219; 32.5 and 17–18), *Kārttika* (cikitsā 1.119 and 401; 63.52), *Kārttikakuṇḍa* (cikitsā 1.9), *Kharanāda* (cikitsā 1.99 and 724), *Madanapāla* (76.233–234; cikitsā 1.111; 5.63), *Madhukoṣa* (3.123), *Medinīkāra* (cikitsā 1.36), *Nighaṇṭu*²⁶ (76.225; cikitsā 1.625), *Rasapradīpa* (3.123; cikitsā 1.415–417, 598–601 and 602–604; 8.35–38), *Rasaratnākara* (cikitsā 1.180–181), Suśruta (passim), Śārṅgadhara (cikitsā 11.86–90), Vāgbhaṭa (passim), *Vaideha* (cikitsā 1.2), *Vaṅgasena* (cikitsā 1.93 and 578), *Videha* (cikitsā 1.703 and 800; 63.14, 77, 105, 125 and 128; 65.18), *Viśvaprakāśa* (cikitsā 72.3), *Vṛddhavāgbhaṭa* (3.82 and 201; cikitsā 1.107), *Vṛnda* (cikitsā 1.93), *Vṛndaṭīkā* (cikitsā 1.235–236 and 249–251), and *Vyāsa* (5.305–306).²⁷

Numerous sources, in ed. m and in the tippanīs, are indicated by means of references to anye, eke, granthāntara, etc.

Important sources have often remained unmentioned: *Dhanvantariyanighaṇṭu*,²⁸ *Madanapāla*,²⁹ *Rājanighaṇṭu*,³⁰ *Rasaratnākara*,³¹ Śārṅgadhara,³² *Vaṅgasena*,³³ and the

Yogaśataka.³⁴ Bāpālā claimed that Bhāvamīśra borrowed from Kaiyadeva.³⁵

Bhāvamīśra or the *Bhāvaprakāśa* are quoted in Aghoranātha's commentary on his *Bhīṣaksarvasva*, Ambikādattaśāstrin's commentary on the *Rasendrasārasaṃgraha*, Ananta's *Pratāpakaḥpadruma*, the *Ārogyāmṛtabindu*, the commentary on the *Āyurvedābhisāra*, the *Āyurvedīya Khanijavijñāna*, Baladeva Prasāda Miśra's *Āyurvedacintāmaṇi*, Bhānuji Dikṣita's commentary on the *Amarakoṣa*, the *Brhannighaṇṭuratanākara*, Devasiṃha Viṭṭhal's *Brhadāsavāriṣṭasaṃgraha*, Vācaka Dīpa-candra's *Laṅghanapathyanirṇaya*, Gaṇanāthasena's commentary on his own *Siddhāntanidāna*, Gulrājśarmamīśra's *Viśikhānupraveśavijñāna* and commentary on the *Āyurvedaprakāśa*, Haridattaśāstrin's commentary on the *Rasataraṅgiṇī*, Hariprapanna's *Rasayogasāgara*, Jivānandavidyāsāgara's commentaries on Kaṇāda's *Nāḍivijñāna* and Gopālākṣṇa's *Rasendrasārasaṃgraha*, Jñārasarāmaśarma's *Anupānadarpaṇa*, Kṛṣṇadatta's commentary on Trimalla's *Śātaśloki*, Mādhava Upādhyāya's *Āyurvedaprakāśa*, Mallinātha's commentary on the *Amarakoṣa*,³⁶ Mauktika's *Vaidyamuktāvalī*, Meghamuni's *Meghavinoda*,³⁷ the *Nāsirasāhī Kankāligrantha*,³⁸ Nirāṅjanaprasāda Gupta's *Pāradasaṃhitā*, the *Pākāṇava*, Raghunātha's *Bhojanakutūhala*, Rājesvara-datta Miśra's *Svāsthavṛttasamuccaya*, Raṅgajyotirvid's *Vicārasudhākara*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, Priyavrat Śarmā's auto-commentaries on his *Āyurvedadarśana* and *Dravyaguṇasūtra*, Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍiparīkṣā*, Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, Śivadatta's commentary on his *Śivakoṣa*, Śivamīśra's *Vaidyaśāstraśivānubhava*, Somadevaśarma's commentary on the *Āyurvedaprakāśa*, Sukhānanda's commentary on Lolimarāja's *Vaidyājīvana*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Trimalla's *Brhadyogatarāṅgiṇī*, Vidyāpati's *Vaidyarahasya*, Vinodalālasena's *Āyurvedavijñāna*, Yādavji Trikamji's *Rasāmṛta*, the *Yogaratanākara*, a *Yogasamgraha*,³⁹ Yogendranātha's *Āyurvijñānaratanākara*, and Yogīndranāthasena's commentary on the *Carakasamhitā*.

Numerous verses of the *Bhāvaprakāśa* are found in Toḍara's *Āyurvedasaukhya*. The *Bhāvaprakāśa* is one of the major sources of Pratāpasīṃha's *Amṛtasāgara* and Jñārasarāma's version of that work; it is also a source of Āryadāsa Kumārasīṃha's *Kvāthamaṇimālā*, the *Bheṣajasamhitā*, *Rasendrasambhava* and *Rasoddhāratanta*. Harṣakīrti is said to have borrowed some formulae from the *Bhāvaprakāśa*.⁴⁰ The *Bhāvaprakāśa* was one of the sources of Kalyāṇa's *Bālatantra* according to Vācaka Dīpacandra.⁴¹

The *Bhāvaprakāśanighaṇṭu* was one of the sources of Raghunāthaji's *Nighaṇṭusaṃgraha* and the major source of Āryadāsa Kumārasīṃha's *Mahauśadhanighaṇṭu*. It is quoted in Gulrājśarmamīśra's commentary on the *Āyurvedaprakāśa*,⁴² Haridattaśāstrin's commentary on the *Rasataraṅgiṇī*, the *Śāligrāmanighaṇṭubhūṣaṇa*, and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.⁴³

Commentaries on the *Bhāvaprakāśa*

Bhāvamīśra himself is reported to have written glosses (tippanī) on his *Bhāvaprakāśa*.⁴⁴ These glosses contain interesting information of diverse kinds: explanations which sometimes refer to the views of earlier authorities, quotations, various readings,⁴⁵ synonyms and vernacular names of drugs,⁴⁶ the relative quantities of

the ingredients of some compound formulae,⁴⁷ vernacular names of diseases,⁴⁸ etc. Another commentary, incompletely preserved and called *Śrīraṇavīrasīṃhadēvāvalokanasadvaidyasiddhāntaratanākara*, was written by Jayadeva, son of Jayakṛṣṇa, during the reign of king Raṇavīrasīṃha of Kāśmīr⁴⁹ who ascended the throne in 1857.⁵⁰

Special features of the *Bhāvaprakāśa*

Special features of the *Bhāvaprakāśa* are: (1) the description of three nāḍis, called respectively samīraṇā, cāndramasī and gaurī, in the female genitals (2.17–20);⁵¹ the authority referred to on this subject is Candramauli; (2) the distinction of eight chief parts of the body (āṅga):⁵² head, neck, arms, chest, belly, the lateral parts of the chest, back and backbone, legs (3.65–93); (3) the adoption of the kedārikulyānyāya as the best model of the way in which the rasa nourishes the other dhātus (3.176); (4) the description of one kind of ojas, of the aṣṭabindu type (3.181–186); (5) the enumeration of the eight auspicious objects (aṣṭamaṅgala; 5.106);⁵³ (6) the description of the way to ward off the evil eye (dṛṣṭidoṣa; 5.131–132);⁵⁴ (7) the distinction of six types of food: cūṣya, peya, lehya, bhojya, bhakṣya and carvya (5.144);⁵⁵ (8) the ways to recognize the best kind of a number of drugs (6.111–120); (9) substitutes for a number of drugs (6.138–166);⁵⁶ (10) the statement that the chief (pradhāna) drug may not be substituted in compound formulae (6.167); (11) the description of the actions and effects of the twenty qualities of drugs (6.203–211); (12) the definitions of pācana, etc. (6.212–237);⁵⁷ (13) the examination (parīkṣā) of a patient by means of darśana, sparśana and praśna (7.1–22); darśana is divided into netra-, jihvā- and mūtraparīkṣā;⁵⁸ nāḍiparīkṣā⁵⁹ is described as a form of sparśana; (14) the description of three series of thirteen samnipāta fevers; the first series (cikitsā 1.449–491), taken from Vaṅgasena (jvara 354–383) for the greater part,⁶⁰ consists of viśphā-raka,⁶¹ āśukārīn, kampana, babhra,⁶² śīghrakārīn, bhallu,⁶³ kūṭapākala, saṃmohaka, pākala, yāmya, krakaca, karkaṭaka,⁶⁴ and vaidārika;⁶⁵ the second series (cikitsā 1.493–505),⁶⁶ for the major part from some unknown source,⁶⁷ consists of śītāgātra, tandrika, pralāpaka, raktaṣṭhīvin, bhugnanetra, abhinyāsa, jihvaka, saṃdhiga, antaka, rugdāha, cittabhrama, karpika, and kaṇṭhakubja; the third series (cikitsā 1.510–522),⁶⁸ consists of kumbhīpaka, prorṇavā, pralāpin, antardāha, daṇḍapāta, antaka, eṇidāha, hāridraka, ajaghoṣa, bhūtaḥāsa, yantrāpīda, saṃnyāsa, and saṃśoṣin; this series is also found, in different orders, in *Jvaratṛiṣatī* (175–187), *Jvaranirṇaya* (4.102–115) and *Jvaratimirabhāskara* (7.308–337); (15) the description of a fever caused by the drinking of contaminated water (durjaladoṣajajvara; cikitsā 1.830–838); (16) the treatment of the ten complications of fever (cikitsā 1.840–863); (17) the description of six types of ajīrṇa (cikitsā 6.16–21) and their treatment (cikitsā 6.128–148); (18) a list of eighty disorders by vāta considerably differing from Caraka's list and consisting of:⁶⁹ śirograha (24.18), alpākṣatā, atyarthajambhā (24.20), hanugraha (24.24–25), jihvāstambha (24.43), gadgadatva (24.45), minminatva (24.45), mūkatā (24.45), vācālātā, pralāpa (24.51), rasānabhijñātā (24.53), bādhirya, karṇanāda, sparśājñātva (24.59: tvakśūnyatā or suptavāta), ardita (24.60–63), manyāstambha (24.75), bāhuṣoṣa (24.79), apabāhuka (24.81), viśvāci (24.86), ūrdhavāta (24.90), ādhmāna (24.93), pratyādhmāna (24.105), vātāṣṭhīlā (24.107–108), pratyāṣṭhīlā (24.109), tūnī (24.112),

pratitūnī (24.113), vahnivaiṣamya, ātopa, pārśvaśūla, trikaśūla (24.115), muhurmūtra-
ṇa (24.122–128), mūtranigraha (24.122–128), malagāḍhatā, puriṣāpravṛtti, grdhraśī
(24.129–132), kalāyakhāñjatā (24.153), khañjatā (24.151), paṅgutā (24.151), kroṣṭu-
śīṣa (24.155), khalī (24.158), vātakaṇṭhaka (24.160), pādahaṣa (24.165), pādadaḥa
(24.162), daṇḍakākṣepa, vātapittakṛtākṣepa (24.167–169: ākṣepa), daṇḍapatānaka
(24.170), abhigāṭakṛtākṣepa, āntarāyāma (24.181–183), bāhyāyāma (24.184–185),
dhanurvāta (24.187: dhanuṣṭambha), kubjaka (24.188), apatantra (24.191–192),
apatāna (24.198–199), pakṣāghāta (24.204–205), akhilāṅgaka (24.213: sarvāṅgavāta),
kampa, stambha, vyathā, toda, bheda, sphuraṇa, raukṣya, kāṛśya, kāṛṣṇya, śaitya,
lomahaṣaṇa, aṅgamarda, aṅgavibhramṣa, śīrāsapṅkoca, aṅgaśoṣa, bhīrutva, moha,
calacittatā, nidrānāśa, svedanāśa, balahāni, śukrakṣaya, rājonaśa, garbhanāśa, and
paribhrama (24.4–16);⁷⁰ (19) the enumeration of forty pitta disorders (cikitsā 27);⁷¹
(20) the enumeration of twenty kapha disorders (cikitsā 28);⁷² (21) the employment
of the term jaratpitta(śūla) as a synonym of pariṇāmaśūla (cikitsā 30.75, 83 and 89);
(22) the earliest description of syphilis (phiraṅgaroga; cikitsā 59) and its treatment;
this disease is said to be contracted through intercourse with strangers from the West
(phiraṅga); an external, internal and combined type are distinguished; the lesion
of the nose (nāsabhaṅga) is already known as a late symptom (upadrava); drugs
recommended in the treatment of syphilis are rasakarpūra⁷³ and other mercurial
preparations, copacīnī,⁷⁴ and ākārakarabha;⁷⁵ (23) the description of śītalā in the
chapter on masūrikā (cikitsā 60.55–92);⁷⁶ seven types are distinguished: bṛhaṭī,
kodravā, pānisahā, sarṣapikā, a type described as rājikākṛtī,⁷⁷ another type of which
the name if left unmentioned,⁷⁸ and carmajā;⁷⁹ the recitation of a hymn to the goddess
Śītalā (60.70–82)⁸⁰ is said to cure the disease; (24) the description of thirty-four
diseases of the nose (cikitsā 65.1–3);⁸¹ (25) the description of some contraceptives
(cikitsā 70.33–34);⁸² (26) some formulae of pākas.⁸³

Some of the surgical instruments mentioned are: avāṇmukha,⁸⁴ candracakra,⁸⁵
candrārḍha,⁸⁶ eṣaṇī,⁸⁷ kharjūrapattraka,⁸⁸ sūcī,⁸⁹ sūcīmukha.⁹⁰

Noteworthy among the medicinal plants and other substances found in the
Bhāvaprakāśanighaṇṭu are:⁹¹ alambuṣā (guḍūcyādi 274);⁹² several types of āluka
(śāka 94–95);⁹³ ālukī as a variety of raktālu (śāka 98);⁹⁴ āmrāgandhiharidrā (harī-
takyādi 198–199);⁹⁵ āmrāvarta, a substance prepared from mango juice (āmrādi
15–16); amṛtaphala (āmrādi 127);⁹⁶ aranyahaladī (harītakyādi 200);⁹⁷ aśmantaka
as a synonym of kāñcanāra (guḍūcyādi 101–102); the drugs forming the group
called aṣṭavarga are elaborately described and their substitutes are also mentioned
(harītakyādi 120–144); bhaṅgā (harītakyādi 233–234);⁹⁸ candraśūra (harītakyādi
96–97);⁹⁹ caturbīja, i.e., the seeds of methikā, candraśūra, kālājāī and yavānikā
(harītakyādi 98–99); chāḡāntrī as a synonym of vṛddhadārūka¹⁰⁰ (inserted between
guḍūcyādi 210 and 211); chikkanī (guḍūcyādi 304);¹⁰¹ ciciṇḍa (śāka 62);¹⁰² cīnāka
(dhānya 78);¹⁰³ cīnākakarpūra (karpūrādi 4);¹⁰⁴ coka, i.e., the root of *Argemone mex-
icana* Linn. (harītakyādi 176–177); damanaka (puṣpa 67–68);¹⁰⁵ two types of danṭī:
laghudanṭī¹⁰⁶ and dravanti¹⁰⁷ (guḍūcyādi 197–200); dārusitā (karpūrādi 66–67);¹⁰⁸
two types of devadālī: devadālī¹⁰⁹ and pītadevadālī¹¹⁰ (guḍūcyādi 291–292); ḍiṇḍīśa
(śāka 83–84);¹¹¹ ḍoḍikā (śāka 87–88);¹¹² dvīpāntaravacā (harītakyādi 107–108);¹¹³

gandhakokilā (karpūrādi 117);¹¹⁴ gandhamālātī (karpūrādi 117);¹¹⁵ two types of
hapuṣā (harītakyādi 109–110);¹¹⁶ haricandana (karpūrādi 14–15);¹¹⁷ two types of
indravāruṇī: indravāruṇī and mahāphalā indravāruṇī (guḍūcyādi 203–206);¹¹⁸ two
types of jāṭī: jāṭī¹¹⁹ and svarnajātikā¹²⁰ (puṣpa 27–28); several varieties of kadālī
(āmrādi 35);¹²¹ kalambī (śāka 19);¹²² kaṅkuṣṭha (dhātavādi 163–164);¹²³ three types
of karañja (guḍūcyādi 119–124): karañja, pūṭikarañja and karañjī;¹²⁴ three types of
kastūrī: kāmārupodbhavā, naipālī and kāśmīrī (karpūrādi 5–8); three types of kharjū-
rikā: bhūmi-¹²⁵ and piṇḍakharjūrikā,¹²⁶ as well as choḥārā; sulemānī is a variety of
piṇḍakharjūrikā (āmrādi 115–122); ahiphenaka (harītakyādi 235–240);¹²⁷ kiṅkirāta
(puṣpa 44–45);¹²⁸ kukundara (guḍūcyādi 305–306);¹²⁹ three types of kuṅkuma:
kāśmīradeśaja, bāhlikadeśasamjāta and pārasīka (karpūrādi 74–78);¹³⁰ kūṭaśālmali
(vaṭādi 58–59);¹³¹ loṇī¹³² and bṛhallōṇī¹³³ (śāka 20–22); various kinds of lotuses
and water-lilies (puṣpa 1–18); mācīkā (harītakyādi 167–168);¹³⁴ makhāṇna (āmrādi
91);¹³⁵ mārkaṇḍikā (guḍūcyādi 289–290);¹³⁶ matsyākṣī (guḍūcyādi 266);¹³⁷ two
types of mūlaka: laghu- and nepālamūlaka (śāka 99–103);¹³⁸ nāgadamanī (guḍūcyādi
299–301: = balāmoṭā);¹³⁹ nāgapuṣpī (guḍūcyādi 252);¹⁴⁰ pāṇiyatāṇḍulīya (śāka 14:
= kañcaṭa);¹⁴¹ pārasīkavacā (harītakyādi 104);¹⁴² pārasīkayavānī (harītakyādi 80);¹⁴³
parpaṭī (karpūrādi 127–128);¹⁴⁴ puṣkaramūla (harītakyādi 174–175)¹⁴⁵ is regarded as
a variety of kuṣṭha; sarpākṣī (guḍūcyādi 267–268);¹⁴⁶ two types of śatāvartī: śatāva-
rī-¹⁴⁷ and mahāśatāvartī¹⁴⁸ (guḍūcyādi 184–188); sinduvāra and nirguṇḍī are described
as two related plants with white, respectively blue flowers (guḍūcyādi 113–114);
śīrīṣikā (vaṭādi 71);¹⁴⁹ two types of sugandhā: ugragandhā (= kulīñjana)¹⁵⁰ and
sthūlagranthī¹⁵¹ (harītakyādi 105–106); svarnavallī (guḍūcyādi 149);¹⁵² śvetakhadira
(vaṭādi 33);¹⁵³ śyonāka and kaṭvaṅga as synonyms (guḍūcyādi 25–26);¹⁵⁴ two types
of tagara: tagara and piṇḍatagara¹⁵⁵ (karpūrādi 28–29); tuvarī (dhānya 68: different
from ādhakī);¹⁵⁶ vanyā methikā (harītakyādi 95);¹⁵⁷ vārṣikī (puṣpa 25–26);¹⁵⁸ two
types of vāstuka: vāstuka¹⁵⁹ and gaḍavāstuka¹⁶⁰ (śāka 5–7); two types of yūthikā:
yūthikā¹⁶¹ and pītayūthikā¹⁶² (puṣpa 29–30).¹⁶³

Some drugs, prescribed in the chapters on therapy, are absent from the *Bhāvapra-
kāśanighaṇṭu*, e.g., ākārakarabha (cikitsā 72.76),¹⁶⁴ bhavaliṅgī (70.31)¹⁶⁵ and īśaliṅgī
(70.32),¹⁶⁶ mājūphala (72.39), pārśvapippala (70.29),¹⁶⁷ rasālakāṇḍa (24.313),¹⁶⁸ and
vajrāṇḍī (41.59).¹⁶⁹

Some dishes described in the *Nighaṇṭu* are:¹⁷⁰ balabhadrikā (kṛtānna 36), be-
ḍhamikā (41–43), dhūmasī (37), dugdhakūpikā (132–136), harīśa (90–93), jāli
(160–161), jharjharī (38), karpūranālikā (117–118), kuṇḍalinī (137–142), kvathitā
(69), roṭikā (30–32),¹⁷¹ sampāva (112–116),¹⁷² sevikā (19–20), tāpaharī (11–14), ūcī
(179), and vesana (78).¹⁷³

The *Nighaṇṭu* describes a large number of fishes in its māmsavarga:¹⁷⁴ atisū-
kṣmamatsya (124),¹⁷⁵ bhakura (107),¹⁷⁶ daṇḍamatsya (116), eraṅga (117),¹⁷⁷ garaghṇī
(119), gargara (113), illīśa (111),¹⁷⁸ kavikā (114), kṣudramatsya (123),¹⁷⁹ madgura
(120), mahāśaphara (118),¹⁸⁰ mocikā (108), pāṭhina (109), proṣṭhī (122),¹⁸¹ rohita
(104–105), sapādamatsya (121),¹⁸² śaṣkulī (112), śīlindhra (106),¹⁸³ śṛṅgin (110), and
varmimatsya (115).

The headings of the descriptions of plants, etc., contain numerous vernacular names

and, occasionally, references to the region where these names are used.¹⁸⁴

The dhātuvādivarga describes seven dhātus: suvarṇa (gold), rūpya (silver), tāmra (copper), raṅga (= vaṅga: tin), yaśada (zinc), śīsa (lead), and loha (iron) (1–52), and seven upadhātus: svarṇamākṣika, tāmamākṣika, tuttha, kāṁpsya, rīti (= pittala), sindūra, and śilājātu (53–85). Mercury (rasa) is described and some saṁskāras are referred to (86–100). The uparasas are: gandha, hīṅgula, abhra, tālaka, śilā, sroto'ñjana, ṭaṅkaṇa, rājāvartaka, cumbaka, sphatikā, śaṅkha, khaṭī, gairika, kāsīsa, rasaka, kaparda, sikatā, bola, kaṅkuṣṭha, and saurāṣṭrī (101–164); the nine ratnas (gems) are: ratna (diamond), gārutmata (emerald), puṣparāga (topaz), māṇikya (ruby), indranīla (sapphire), gomeda (onyx), vaidūrya (cat's eye), mauktika (pearl), and vidruma (coral) (165–188); the uparatanas are only partially enumerated (189–190); the nine poisonous substances (viṣa) are: vatsanābha, hāridra, saktuka, pradīpana, saurāṣṭrika, śṛṅgika, kālākūṭa, hālāhala, and brahmaputra (191–205); seven upaviṣas are enumerated: arkakṣīra, snuḥikṣīra, lāṅgālī, karavīraka, guñjā, ahiphena, and dhattūra (206).

The Guṇaratnamālā

(2) The *Guṇaratnamālā*¹⁸⁵ is a work on dietetics and materia medica in twenty-six chapters (varga).¹⁸⁶ Many of its verses are identical with or similar to verses found in the *Bhāvaprakāśanighaṇṭu*, but it is more elaborate and contains additional information.¹⁸⁷ It is quoted in Bhāvamīśra's own glosses on the *Bhāvaprakāśa*,¹⁸⁸ probably in Śivadatta's commentary on his *Śivakoṣa*,¹⁸⁹ and in Ṭoḍara's *Āyurvedasaukhya*.¹⁹⁰

The author

Bhāvamīśra,¹⁹¹ son of Miśralatākana,¹⁹² was a brāhmaṇa¹⁹³ who resided in Northern India.¹⁹⁴ It is said that the *Bhāvaprakāśa* had great authority in Mahārāṣṭra.¹⁹⁵ Some scholars are of the opinion that Bhāvamīśra may have been one of those who compiled Ṭoḍaramalla's *Āyurvedasaukhya*.¹⁹⁶

Date

The chronological position of the *Bhāvaprakāśa* depends primarily on the introduction into India of syphilis (phiraṅgaroga) and of sarsaparilla (copacīnī),¹⁹⁷ one of the main drugs used in its treatment. It is usually claimed that the Portuguese imported the disease,¹⁹⁸ and that sarsaparilla was made known to them at Goa by Chinese traders about 1535.¹⁹⁹ The *Bhāvaprakāśa* must therefore have been composed after that date. The lower limit depends on the reliability of the date of completion, 1558/59, of one of the MSS.²⁰⁰ Several arguments can be adduced to assign Bhāvamīśra roughly to the period 1550–1590: Ṭoḍaramalla's *Āyurvedasaukhya*, compiled between 1572 and 1589 probably quotes Bhāvamīśra's *Guṇaratnamālā*; Śivamīśra quotes the *Bhāvaprakāśa* in his *Vaidyaśāstraśivānubhava*, written in 1604/05, as well as Bhānuji Dīkṣita in his commentary on the *Amarakoṣa*,²⁰¹ dating from the first half of the seventeenth century;²⁰² Harṣakīrti (1535–1610) may have been influenced by Bhāvamīśra in some of his prescriptions,²⁰³ as well as Lolimbarāja (last quarter of the sixteenth century).²⁰⁴

Dalapati(rāja)

Dalapati, or Dalapatirāja, son of Vallabha and pupil of Sūryapaṇḍita, wrote his *Vaidyadarpaṇa* at the end of the fifteenth or the beginning of the sixteenth century.²⁰⁵

Dāmodara, alias Jñānadeva

Dāmodara, alias Jñānadeva, was the author of (1) *Vyādhyargala*, and (2) a commentary on Lolimbarāja's *Vaidyājīvana*.²⁰⁶ This Dāmodara belongs to the end of the sixteenth or the beginning of the seventeenth century, since a MS of his commentary on the *Vaidyājīvana* dates from 1612/13.

Deveśvara or Deveśvaropādhyāya

Deveśvara, or Deveśvaropādhyāya, son of Murāri, wrote a monograph on women's diseases, called *Strīvilāsa*. The author was a śrīgaṇḍa brāhmaṇa who probably lived in Gujarāt, since Gujarātī words are met with in his treatise. The work dates from the sixteenth or seventeenth century.²⁰⁷ It is quoted in the *Rasayogasāgara*.²⁰⁸

Gopāla Vaidya

Gopāla Vaidya, son of Mahādeva, composed the *Anubhavasāra* in the sixteenth century.²⁰⁹

Haṁsarāja or Haṁsanātha

Haṁsarāja or Haṁsanātha²¹⁰ was the author of (1) the *Bhīṣakcakkacittotsava*,²¹¹ also called *Haṁsarājanidāna*,²¹² and (2) the *(Sarva)jvarasamuccayadarpaṇa*.²¹³

Contents

The *Bhīṣakcakkacittotsava* is a treatise on nidāna in about 800 skillful verses of various metres, composed by the author himself. It describes the origins (nidāna) and symptoms (rūpa or lakṣaṇa) of all the diseases recognized by the author, sometimes adding the prodromes (pūrvārūpa),²¹⁴ things beneficial (pathya)²¹⁵ or harmful (apathya),²¹⁶ complications (upadrava),²¹⁷ and signs foreboding death (ariṣṭa).²¹⁸ The pathogenesis (samprāpti) of the diseases is not included in Haṁsarāja's work.

Some verses on the examination of the pulse and on the causes of the excitement of the doṣas are mentioned at the beginning of the treatise; it ends with verses on the examination of the urine, the tailabindu method included, and on the types of napuṁsaka (impotence and sexual perversities).

Deities invoked and authorities referred to in the introductory verses (1–8) are: the Aśvins,²¹⁹ Ātreya, Atri(ka),²²⁰ Bharadvāja, Brahmā, Bṛhaspati, Caraka,²²¹ Dāmodara, Dhanvantari,²²² Gautama, Hārīta(ka), Mādhava, Nakula, Parāśara, Sarasvatī, Śiva, Śukra, Suśeṇa,²²³ Suśruta, Vāgbhaṭa, and Viṣṇu.

The *Bhīṣakcaccittotsava* is quoted in Vācaka Dīpacandra's *Laṅghanapathya-nirṇaya*, the *Haṃsarājaṇidāna* in the *Ārogyāmṛtabindu*.

The *Haṃsarājaṇidāna* has remained a popular work up to the present day,²²⁴ especially among Jain physicians.²²⁵

Special features

The arrangement of the diseases adopted by *Haṃsarāja* agrees in most respects with that of the *Mādhavanidāna*. At variance with *Mādhava*'s order are the chapter on *bhaṅgandara*, placed between those dealing with *arśas* and *ajīṛṇa*, and the description of *masūrikā* as a variety of *pramehapiṭikā*, without devoting a special chapter to it as a nosological entity. *Haṃsarāja*'s treatise has no chapters on *śoṭha*, *vṛddhi*, *vraṇaśoṭha*, *śātravraṇa*, *sadyovraṇa*, *bhagna*, *nāḍivraṇa*, *visphoṭa*, and *masūrikā*. Other disorders omitted are *uraḥkṣata* (in the chapter on *rājayakṣman*), *bhrama*, *nidrā*, and *saṃnyāsa* (in the chapter on *mūrchā*), *paramāda* (in the chapter on *pānātyaya*), *pariṇāmasūla* and *annadravaśūla* (in the chapter on *śūla*), *galagaṇḍa*, *apacī*, *granthi*, and *arbuda* (in the chapter on *ganḍamālā*), and *mūdhagarbha* (in the chapters on women's diseases).

In general, the *Bhīṣakcaccittotsava* is much more dominated by the *tridoṣa* doctrine than the *Mādhavanidāna*. When compared with the latter, it shows many divergences. The chapter on fevers describes a large number of these which cannot be found in *Mādhava*'s *Rugviniścaya*: one series of thirteen *saṃnipāta* fevers: *saṃdhika*, *antaka*, *cittabhrama*, *rugdāhaka*, *śītāṅga*, *tandrika*, *kaṇṭhakubja*, *karṇaka*, *bhugnanetra*, *raktaśthīvin*, *pralāpin*, *jihvaka*, and *abhinyāsaka*²²⁶ (8–12); moreover, *ajīṛṇajvara* (12), *raktajvara* (12), *dṣṭijvara* (13), *viḍjvara* (13), *khedajvara* (13), *dhātukṣayajvara* (15), *mahendrajvara* (16), *velājvara* (16), *ekāṅgajvara* (17), and a second type of *antakajvara* (17). The following names are given to the mythical shapes of fever: *bībhatsa*-, *triśiro*-, *kapila*-, *bhasmavikṣepaka*-, *tripāda*-, *piṅgākṣa*-, *mahodara*-, and *jvaladvigraha-jvara* (24–26). The chapter on *arśas* has no *raktaja* and *sahaja* types. The varieties of *bhaṅgandara* differ from those in the *Mādhavanidāna*; a *vāta*, *pitta*, and *saṃnipāta* type are described. The chapter on *ajīṛṇa* deals with three types only, by *vāta*, *pitta* and *kapha*, while the *Mādhavanidāna* has six types. The chapter on *pāṇḍuroga* refers to the variety brought about by the ingestion of clay (*mṛd*), without describing its symptoms, and adds a type caused by betel nuts (*pūgīphala*). The chapter on *kāmalā*, *kumbhakāmalā* and *halimaka* adds the symptoms of the disorder called *pānakī*.²²⁷ The types of *śoṣa* caused by sexual excesses, etc., are omitted in the chapter on *rājayakṣman*. The chapter on *kāsa* has only *doṣaja* types; the *kṣataja* and *kṣayaja* types of *Mādhava* are absent. The chapter on *hikkā* adds varieties occurring in children and in the elderly. The chapter on *śvāsa* enumerates the symptoms of *svābhāvika*-, *ati*- and *mahāśvāsa* instead of those of the five types of *Mādhava*. *Haṃsarāja* distinguishes three *doṣaja* types of *svarabheda* and omits the other ones described by *Mādhava*. The same applies to *aruci*. The *āgantuja* and *krimija* types of *chardi* are absent. The eight varieties of *trṣṇā* differ in some respects from those described in the *Mādhavanidāna*; the *āmaja* and *upasargaja* types of *Mādhava* are replaced by those arising from fear (*bhaya*) and fatigue (*śrama*). The chapter on *mūrchā* and allied conditions describes *klama* instead of *tandrā*. The variety of *unmāda* caused by *viṣa* is absent.

The specific types of *vātavyādhī* of the *Mādhavanidāna*, beginning with *pakṣava-dha*, are not separately dealt with; some of these disorders are referred to, for example *khāñjya* (68 and 70), *grdhrasī* (69), *daṇḍaka* (72 and 74), and *pakṣaghāta* (73). The chapter on *mūtrāghāta* describes only *doṣaja* types, not the specific types of *Mādhava*. The chapter on *prameha* mentions successively the types caused by *vāta*, *pitta* and *kapha*, whereas the usual order is the reverse one; the varieties distinguished disagree with those of the *Mādhavanidāna*. Two chapters are devoted to *pramehapiṭikā*; the first one describes *doṣaja* types, the second one the series of ten varieties known from the classical *saṃhitās* and also found in the *Mādhavanidāna*; two of the names are different: *vinatā* and *alajī* are replaced by *piṇḍikā* and *vitatāñjalī*. Three *doṣaja* types of *ganḍamālā* are distinguished by *Haṃsarāja*, as opposed to the single type of *Mādhava*. The *āgantuja* type of *vidradhi* is omitted, as well as the *raktaja* type of *upadamsa*. The eighteen varieties of *śūkadoṣa* are referred to, but not systematically described; separately described are only *saṛsapikā*, *kumbhī*, *saṃmūdhapiṭikā*, *dirghikā*,²²⁸ and *puṣkarikā*; the other varieties appear to be included among the *doṣaja* types mentioned by *Haṃsarāja*. The eighteen types of *kuṣṭha* are referred to; eleven of these are separately described: *viṣama*, *audumbara*, *mūkajihva*,²²⁹ *maṇḍala*, *karavālā*,²³⁰ *kiṇī*,²³¹ *dadru*, *carṇadala*, *carṇakuṣṭha*, *pāmā*, and *citrakuṣṭha*; the remaining ones are regarded as *doṣaja*.

Three *doṣaja* types of *amlapitta* are distinguished, as opposed to *Mādhava*'s *adhoga* and *ūrdhvaga* varieties. The *kṣudrarogas* are arranged in almost the same order as in the *Mādhavanidāna*, but their number has been reduced: *cippa*, *kunakha*, *anuśayī*, *arūṃṣikā*, *padminikaṇṭaka*, *jatumaṇi*, and *ahipūtana* are absent; *antrārajī* is called *añjalī*, *indravidhā* *indravṛddhi*, *agnirohinī* *jvālāmukhīrohinī*; *parivartikā* is replaced by *karṇikā*. The four types of *oṣṭharoga* which are not primarily *doṣaja* are omitted in the chapter on *mukharoga*; diseases of the gums left out by *Haṃsarāja* are *upakuṣa*, *khalivardhana* and the five varieties of *dantamūlanāḍī*; *paridara* is replaced by *aṣṭkpariṣara*, and a disease called *śophakaśa* has been added; the disease of the teeth called *kapālikā* is absent, as well as the disease of the palate called *adhrūṣa*; the same applies to *tālvarbuda* and *tālupuppūṭa*; the diseases of the throat called *valaya*, *ekavṛnda*, *vṛnda*, *svaraghna*, *māmsatāna*, and *vidārī* are absent. Diseases of the ear absent are *karṇaśoṭha*, *karṇārbuda* and *karṇārśas*, as well as the five diseases of the earlobes. Many diseases of the eyes are not described; added are, on the other hand, *pūyala*,²³² *parivāra*, and *brāhmaṇī*. Absent among the diseases of the head are *kṣayajaśiroroga*, *anantavāta*, *ardhāvabhedaka*, and *śaṅkhaka*. The chapter on *strīroga* describes *pradara*, *yonikanda* and the twelve *yonirogas*. The chapter on *bālaroga* includes the disorders of the breastmilk; among the children's diseases *paribhava* and *mahāpadma* are absent; *bālagrahas* mentioned are *Skanda*, *Śakunī*, *Revatī*, *Pūtanā*, *Maṇḍitā*, and *Naigameya*. The last chapter defines the following types of *napuṃsaka*: *āsekya*, *saugandhika*, *kumbhika*, *īrṣyaka*, and the male and female variety of *śaṇḍha*.²³³

A salient feature of *Haṃsarāja*'s work is the absence of diseases like *bradhna*, *snāyuka*, *somaroga* and *phiraṅga*, added to *āyurvedic* nosography after *Mādhava*'s age.

The author

His name is Haṃsarāja in the last verse of the chapter on mūtraparīkṣā and in the colophons of the edition; he is sometimes called Haṃsanātha.²³⁴ No particulars about him are known.

Date

The terminus post quem of Haṃsarāja's date is provided by a reference to Cāmuṇḍa's *Jvaratimirabhāskara*, composed in 1490 or 1492, in a MS of the *Sarvajvarasamuccayadarpaṇa*.²³⁵ Dāmodara, referred to in the *Bhīṣakcacrattotsava*, may be the author of the *Ārogyacintāmaṇi*, who lived in the first half of the fourteenth century, or, less probably, the one who composed the *Bhīṣavinoda*, a work to be placed after the period of Bhāvamiśra. Other persons called Dāmodara, for example the father of the author of the *Śāringadharasamhitā*,²³⁶ need not be taken into account. It is improbable that Haṃsarāja is later than Bhāvamiśra, phiraṅgaroga not being mentioned in the former's work, and the worship of Śītalā in cases of smallpox being referred to in passing only, without describing the disease called after this goddess.²³⁷ The *Bhīṣakcacrattotsava* can therefore be assigned to the sixteenth century. The earliest author known to quote it is Vācaka Dīpacandra in his *Laṅghanapathyanirṇaya*, composed in 1735/36.

P.V. Sharma²³⁸ places Haṃsarāja in the seventeenth century, basing himself on the reference to Dāmodara, and supposing this Dāmodara to be the author of the *Bhīṣavinoda* and of a commentary on Suśeṇa's *Āyurvedamahodadhī*, called *Ārogyacintāmaṇi*. The coupling of Dāmodara and Suśeṇa, of some importance to P.V. Sharma's reasoning, is, however, unfounded, since the *Ārogyacintāmaṇi* is not a commentary, but an independent treatise, having nothing to do with Suśeṇa, and composed by a Dāmodara who, as stated above, lived in the first half of the fourteenth century. The *Bhīṣavinoda* appears to be much later than Haṃsarāja's work since it mentions phiraṅgaroga, unknown to the latter. P.V. Sharma has overlooked the reference to the *Jvaratimirabhāskara* in Haṃsarāja's *Sarvajvarasamuccayadarpaṇa*.

Harṣakīrti

Harṣakīrti was the author of the *Yogacintāmaṇi*.²³⁹ Besides this work on medicine he wrote one synonymic and two homonymic dictionaries,²⁴⁰ as well as independent treatises on diverse subjects and a number of commentaries.²⁴¹

The *Yogacintāmaṇi*²⁴² is chiefly a collection of recipes, consisting of about 1,700 verses with an admixture of prose, arranged in seven chapters (adhikāra). Its most conspicuous characteristic is the arrangement of the recipes according to the type of pharmaceutical preparation. Their order, pāka, cūrṇa, guṭikā, kvātha, ghr̥ta, and taila, differs from that in works which are similarly conceived, such as Candrāṭa's *Yogarātnasamuccaya*, the *Śāringadharasamhitā* and the prayogakhaṇḍa of Soḍhala's *Gadanigraha*. No system can be detected in the series of diseases against which the formulae are to be employed, but the author's acquaintance with the *Mādhavanidāna* is apparent from a list of diseases at the end of the work in the section on karmavipāka.

*Contents.*²⁴³

Chapter one (pākādhikāra; 329 verses) describes aṣṭasthānaparīkṣā,²⁴⁴ i.e., the examination of the pulse (nāḍī),²⁴⁵ urine (mūtra),²⁴⁶ eyes (netra),²⁴⁷ face (mukha),²⁴⁸ tongue (jihvā),²⁴⁹ faeces (mala), voice (svara), and skin (sparśa) of a patient. This section is followed by verses on aṣṭas, weights and measures,²⁵⁰ and anatomy.²⁵¹ After giving rules for the preparation of a pāka,²⁵² the treatise continues with a long series of recipes of pākas. Chapter two (157 verses) is devoted to cūrṇas, chapter three (180 verses) contains formulae of guṭikās, chapter four (149 verses) describes kvāthas, chapter five (83 verses) ghr̥tas, and chapter six (117 verses) tailas. Chapter seven (miśrādhikāra) is, in accordance with its title, a composite one. It begins with a table of its contents (7 verses) and deals with preparations called guggulu after its chief ingredient (gugguluprakaraṇa; 52 verses), śankhadrāva (7 verses), the śodhana and māraṇa of rasas, etc., and the preparation of mercury for internal use (163 verses), formulae of rasas (rasaprakaraṇa; 93 verses), āsavas (49 verses), lepas (lepaaprakaraṇa; 98 verses), bloodletting, nasya, virecana, vamaṇa, sveda, bandhana (bandaging), bāṣpa (vapour-bath), cūrṇamardana (covering the body with a powdered drug), the application of a medicated rotāka to the head, piṇḍikā or kavali (a kind of poultice), gaṇḍūṣa, dhūpa, the excellent qualities of takra (diluted buttermilk), various formulae, the symptoms and treatment of madhū-raka,²⁵³ various formulae of general application (sādhāraṇayogas), various types of general treatment (sāmānyakāyacikitsā), dambha (cauterization), formulae promoting fertility in women, contraceptive measures and abortifacients (166 verses). The treatise ends with a section on karmavipāka (27 verses) in the form of a dialogue between Sūrya and Aruṇa which includes a list of diseases that closely agrees with the *Mādhavanidāna*.

The authorities consulted by Harṣakīrti are enumerated in one of the concluding verses: Ātreya, Caraka, Vāgbhaṭa, Suśruta, the Aśvins, Hārīta, Vṛnda, the (Cikitsā-)kalikā, Bhṛgu,²⁵⁴ Bheḍa, the (*Mādhava*)nidāna, and *Karmavipāka*. He also refers to a *Yogapradīpa* and the *Yogaśata* in the last verse of his treatise. A cursory examination of the *Yogacintāmaṇi* shows that the *Śāringadharasamhitā*, although left unmentioned, may have been an important source of Harṣakīrti.²⁵⁵

Quotations from Harṣakīrti's *Yogacintāmaṇi* are found in Yādavaḥ Trikamajī Ācārya's *Siddhayogasamgraha*. (Harṣakīrti's) *Yogacintāmaṇi* was one of the sources of Devasiṃha Viṭṭhal's *Bṛhadāsavāriṣṭasamgraha*, Hariprapanna's *Rasayogasāgara*, and Pratāpasimha's *Amṛtasāgara*.

A *Yogacintāmaṇi* is quoted in the *Āyurvedīya Khanjavijñāna*, *Bheṣajasamhitā*, Meghamuni's *Meghavinoda*,²⁵⁶ Nidhi's *Yogasamuccaya*, Nirañjanaprasāda Gupta's *Pāradasaṃhitā*, the *Pākamārtanḍa*, Rāmacandra's *Rāmaṇinoda*,²⁵⁷ the *Rasendra-sambhava*, and the *Yogarātnākara*.²⁵⁸ A *Yogacintāmaṇi* was one of the sources of Kalyāṇa's *Bālatantra* according to Dīpacandra.²⁵⁹

A commentary on the *Yogacintāmaṇi* has been written by Narasiṃha, a Jain monk of the Kharataragaccha²⁶⁰ and a pupil of Ratnarājagaṇi.²⁶¹ A *Yogacintāmaṇiṭippaṇa* by Bhavānī Sahāya²⁶² may be a commentary on Harṣakīrti's work.

Special features

Important in the field of diagnostics is Harṣakīrti's description of aṣṭasthānaparīkṣā (3–14), probably the earliest of its kind.²⁶³ Nosologically interesting: are the description of madhūraka (317), the earliest mention of this fever in a Sanskrit medical text; the use of the term nāsūra (296)²⁶⁴ for a kind of ulcer; a disorder called candrikā (295) or candanā (296);²⁶⁵ the occurrence of mṛgavāta (156) and mṛgīvāta (148 and 326) as synonyms of apasmāra; kamalavāta (169) as a synonym of kāmālā; the mention of nīradoṣa (87) or vāriroga (236), mṛdbhakṣaṇavikāras (236), lūtā (189), urograha (215), and pāradavikāra (243); occasional references to specific types of saṃnipāta fever (148: abhinyāsa and antaka; 147: cittabhrama; 148: cittavibhrama; 147, 148, and 167: pralāpa; 167: hāridraka); a reference to different views on the number of fevers to be distinguished (339) and to the dissenting view that the vāta diseases are not eighty but eighty-four in number (329); the absence of prescriptions against phiraṅgaroga, śītalā, snāyukaroga and vardhma.

Important in the field of pharmaceutics is the separate chapter on pākas, the earliest one in Sanskrit medical literature.

Therapeutically interesting is the use of a mantra, in which a magadhadeśārāya is invoked, in the treatment of madhūraka (318). Among the points suitable for cauterization the brahmasthāna (148) or daśamadvāra (148 and 167) is mentioned, which may betray Tantric influence. A striking feature is also the frequent prescription of ākallaka (and its synonyms),²⁶⁶ mājū(phala)²⁶⁷ (31, 60, 69, 103, 277, 287, 296), mastakī (48, 77, 271) or mastagī (103, 137),²⁶⁸ opium,²⁶⁹ Cannabis,²⁷⁰ and mercury. Honey, a substance forbidden to Jains as an article of diet, is a frequent ingredient of Harṣakīrti's prescriptions.

Noteworthy substances from Harṣakīrti's materia medica, which contains colloquial names and substances of foreign origin, are moreover: cīṇikabābī (46; 265),²⁷¹ cobacīnī (323),²⁷² hemambhodhara (31),²⁷³ hiramajā (297), jāvitri (44),²⁷⁴ jhinjhiṇī (60),²⁷⁵ kabābī (60),²⁷⁶ kālomjī (311),²⁷⁷ kasela (68),²⁷⁸ kauṇika (43),²⁷⁹ khairiragunda (60),²⁸⁰ khurasāna (311),²⁸¹ khurasānikā (31), kucīla (156),²⁸² muradāśrīga (295),²⁸³ phaṭikā (60), rasakarpūra (246),²⁸⁴ saṇa (136),²⁸⁵ sātharī (60),²⁸⁶ siṇāvāsika (34),²⁸⁷ and śvetāhā (180).²⁸⁸

The author

Harṣakīrti²⁸⁹ was a Jain monk²⁹⁰ of the Tapāgaccha²⁹¹ and a resident of Nāgpur.²⁹² His teacher was Candrakīrti²⁹³ and his patron Pravarasimha.²⁹⁴ The vācaka Vidyātilaka of the Upakeśagaccha may have been one of his collaborators.²⁹⁵

Date

Harṣakīrti's career has been reconstructed by C. Vogel.²⁹⁶ He was active as a scribe as early as 1556/57, had risen to the rank of upādhyāya by 1578/79,²⁹⁷ bore the title of Sūri since 1582 and had passed away in 1616.²⁹⁸ His floruit may thus be fixed tentatively as 1535–1616. These dates agree with internal evidence from the *Yogacintāmaṇi*: the prescription of cobacīnī and rasakarpūra indicate that he is of about the same period as

Bhāvamīśra. The oldest MSS of the *Yogacintāmaṇi* were completed in 1666, respectively 1668.²⁹⁹

Kalyāṇa

Kalyāṇa³⁰⁰ was the author of the *Bālatantra*.³⁰¹

Contents

The *Bālatantra* is a treatise in 831 verses,³⁰² arranged in fourteen chapters (paṭala). It opens with a maṅgalācaraṇa addressed to Gaṇeśa and a verse giving the name of the author, the title of the work and some of its sources.

Chapter one (śoḍaśavandhyāpratīkāra) deals with two series of eight disorders of fertility in women and their treatment. The first series consists of four types of infertility caused by the doṣas (pitta, vāta, kapha, saṃnipāta),³⁰³ two by grahas,³⁰⁴ one type by the wrath of the gods, and one by magic.³⁰⁵ The second series describes eight types of infertile women, called tripakṣā, subhratī, sadbhā, trimukhī, vyāghrīṇī, vakrī, kamalīnī, and vyaktīnī.

Chapter two (sādhāraṇavandhyauśadhakathana) is about the treatment of various unspecified types of infertility. Chapter three (puruṣavīryavṛddhikathana) contains recipes which promote male potency, recipes appeasing various disorders in men and women which prevent procreation, recipes of a vājīkaraṇa type, etc. Chapter four (garbhādhānakālarudrasnānakathana) describes rituals, including mantras, for begetting healthy offspring of the desired sex, a ritual to be performed in digging up the lakṣmaṇā plant, which, if put in the right nostril of a woman, guarantees her giving birth to a son,³⁰⁶ and elaborate rules for the rudrasnāna, i.e., a Tantric ritual,³⁰⁷ which ensures a childless couple of the birth of children. Chapter five (garbiṇīgarbharakṣākathana) is concerned with mantras and offerings to twelve gods and groups of deities³⁰⁸ protecting the expectant mother and the child in the womb during the twelve months of pregnancy. Chapter six (sukhaprasavopāyakathana) is devoted to procedures, for the greater part of a magical character, which secure an easy delivery.

Chapters seven to eleven describe grahas³⁰⁹ who attack children, the symptoms they produce, and the ways to ward them off.³¹⁰ Chapter seven (dinagrhitābālagrahaḥara) describes ten grahas³¹¹ who may assault a child during the first ten days of its life,³¹² chapter eight (māsagrhitābālagrahaḥara) twelve who do so during the twelve months of its first year,³¹³ and chapter nine (varṣagrhitābālagrahaḥara) sixteen grahas who prey upon a child during the first sixteen years of its life.³¹⁴ Chapter ten (dinamāsavarṣābālagrahopāyakathana) gives the names of sixteen more grahas,³¹⁵ whose attack can be expected during the first day, month or year, second day, month or year, etc.,³¹⁶ and chapter eleven (sādhāraṇa) mentions common measures against all types of grahas, besides adding nine names of grahas³¹⁷ whose attacks are seen as a punishment for offences committed during a previous life. The measures described in order to ward off attacks by grahas usually consist of offerings (bali) of a specified number of various objects³¹⁸ to be deposited in a particular quarter of the sky,

accompanied by the muttering of mantras.

The subjects of chapter twelve (jvaraharaṇopāyakathana) are: recipes which promote lactation in nursing mothers, the wet-nurse, measures which purify the milk, the treatment of some disorders especially occurring in infants (inflammation of navel, anal region, and mouth), and the therapy of fevers in children. Chapter thirteen (śītalācikitsākathana) is about the treatment of a long series of children's diseases ending with śītalā.³¹⁹ Chapter fourteen (nānāprayogakathana) deals with diseases of eyes, nose, head, and mouth, and ends with verses about antidotes and rasāyana. The order of the diseases mentioned in chapters thirteen and fourteen partially agrees with the *Mādhavanidāna* but makes a rather chaotic impression.

Sources mentioned by Kalyāṇa are: Dhanvantari (13.39–41), the *Prayogasāra* (1.2),³²⁰ and *Suśruta* (1.2).

A commentary in Hindī (mixed with Rājasthānī) on the *Bālatantra* was written by Vācaka Dīpacandra, author of the *Laṅghanapathyanirṇaya* (eighteenth century); its title is *Bālatantrabhāṣāvacanikā* or *Bālatantragranthavacanikābandha*.³²¹ Dīpacandra mentions the following authors and works as sources of Kalyāṇadāsa: Ātreya, *Bhāvaprakāśa*, Bheḍa, Caraka, Hārīta, *Samnipātakalikā*, *Suśruta*, Tōḍarānanda, Vāgbhaṭa, *Vaidyakaśāroddhāra*, *Vaidyavinoda*, Vāṅgasena, *Yogacintāmaṇi*, *Yogarātnāvalī*, and *Yogaśata*.³²²

Special features

Kalyāṇa's work shows a great deal of Tantric influence in its descriptions of rituals and in the use of mantras.³²³ Magical elements abound in the therapeutic measures described,³²⁴ which explains the frequent use of substances like excrements, hairs, nails, horns, etc., of various animals. The more remarkable is the almost complete absence of substances and formulae derived from iatrochemistry. Kalyāṇa's materia medica consists for a very large part of medicinal plants and some minerals known from the classical āyurvedic texts. Moreover, his recipes are usually relatively simple.

Mercury is prescribed once only (3.2), opium twice (3.56 and 59), and the seed capsule of the opium-poppy (khasaphala) once only (3.54), while Cannabis is completely absent.

Some remarkable names of plants are: kṣuraka (3.45),³²⁵ putramāñjārikā (2.22–23), ratnamālā (1.46), rudrajaṭā (12.89),³²⁶ śivalīngī (2.22),³²⁷ and tejani (12.87).³²⁸

Noteworthy in the field of nosology are the second series of types of infertile women in chapter one³²⁹ and the occurrence of a disease called ksudraśītalikā (13.90).

The author

At the end of his treatise (14.27–29), Kalyāṇa claims to be a son of Mahīdhara, a devotee of Lakṣmīṅśīma, and a grandson of Rāmadāsa, a paṇḍita of Ahicchatra³³⁰ lineage and a devotee of Rāmacandra. Kalyāṇa's father, Mahīdhara, is generally considered to be the author of that name who, together with his son Kalyāṇa and other learned brāhmaṇas, composed the *Mantramahodadhī*.³³¹ Mahīdhara, however, mentions in his genealogy that he was a son of Phanūbhaṭṭa,³³² a devotee of Rāma, and a grandson of Ratnākara, an Ahicchatra brāhmaṇa of Vatsagotra. He adds that he is devoted to

Narahari,³³³ that he left his birthplace and moved to Vārāṇasī.³³⁴ If Rāmadāsa³³⁵ were a second name of Phannabhaṭṭa, who was a devotee of Rāma, the chief author of the *Mantramahodadhī* was indeed the father of the author of the *Bālatantra*.³³⁶

Date

Kalyāṇa mentions that he completed his treatise in a Śiva temple in the year 1587/88.³³⁷

Kavikaṇṭhahāra

Kavikaṇṭhahāra,³³⁸ son of Vaidya Trilocana Kavicandra,³³⁹ wrote the *Prayogarātnā-kara*.³⁴⁰ The author was patronized by prince Rāmacandra and lived in the sixteenth or seventeenth century.³⁴¹

The work begins with the description of the processing of rasas and uparasas, followed by a section on the medicinal uses of animal and vegetable products, but it is chiefly concerned with therapy. The arrangement of the diseases agrees with that of *Mādhava*.

Sources quoted are Bhīmaparākrama, Garga, Maheśvara, Pradyumna, *Rasarātnā-dīpa*, and *Suśruta*. The author puts himself sometimes in opposition to the Southern school (dākṣiṇātyāḥ) and also mentions a Western school (pāścātyāḥ).³⁴² The *Prayogarātnākara* is frequently quoted in the *Samdehabhaṇḍī*, a compilation on the preparation of medicines, printed at Berhampore in 1868.³⁴³

Kṣemaśarman

The *Kṣemakutūhala* by Kṣemaśarman^{344, 345} is a book on cookery and dietetics for use at the royal court.

Contents

The treatise consists of about 1,100 verses arranged in twelve chapters (utsava). Chapter one (vaṃśavaṇṇana) describes, after two introductory verses, the genealogy of the author (3–18), the composition of the book and its merits (19–22), its contents (23–35), technical terms employed in preparing food (36–50), weights and measures (50–51), rules for the ratio between water and the other ingredients in various dishes (52–58), and rules for the preparation of a rasālā and a pāna (59–60). Chapter two (mahānasopayogyopakaraṇaprasaṃsana) deals with the royal kitchen, its lay-out and its utensils (8–25), and with protection of the king from poison (25–39). Chapter three (vaidyāhārasūpakāraprasaṃsana) describes the qualities of a good physician and cook, and gives general rules to be observed when taking food (1–52). Chapter four (ṛtulakṣaṇacaryāprasāṃsana) gives the behavioural rules during the various seasons (1–38), and chapter five (dinacaryāprasāṃsana) those to be observed during the parts of day and night (1–94). Chapter six (māṃsaprasaṃsana) is about meat dishes (1–214) and chapter seven (matsyamāṃsaprasaṃsana) about fish courses (1–36). Chapter eight (śaḍvidhaśākāprasāṃsana) deals with the six types of vegetables and their medicinal qualities (1–207), while chapter nine (piṣṭānnakṛtprakāraprasaṃsana)

is about fermented dishes (saṃdhānaka; 1–11) and various kinds of vāṭaka (12–56). Chapter ten (pakvānnaprasaṃsana) deals with a long series of dishes (1–144), and chapter eleven (kṣudbodhavasutprasāṃsana) with appetizers (1–29). Chapter twelve (gorasapānakādiprasāṃsana) describes the qualities of milk and other dairy produce, as well as drinks (pānaka), to which are added behavioural rules to be observed after finishing a meal (1–121), verses on the author's genealogy (122–124), and some concluding verses (125–127).

The author mentions (1.21) that he wrote his work after consulting the *Gaurīmata*, *Caraka*, *Vāgbhaṭa*, *Bhīmasūkti*, *Hārīta*, *Suśruta*, and *Ravisiddhapāka*. Authorities referred to in the body of the text are *Caraka* (3.17), *Gaurīmata* (2.7), *Hārīta* (3.17), *Nala* (11.14), and *Suśruta* (3.17).

The *Kṣemakutūhala* is quoted in *Vācaka Dīpacandra's Laṅghanapathyanirṇaya* and *Rājeśvaradatta Miśra's Svasthavṛttasamuccaya*.

Special features

The *Kṣemakutūhala* contains such a large number of interesting technical terms that only a few of these can be mentioned. Seven types of pāka are distinguished: bharjana, talana,³⁴⁶ sveda, pacana, kvathana, tāndūra and puṭapāka (1.37–41). The terms vesavāra, kāsamarda, karāla and uddhūlana are used in the sense of condiment (1.42–50).

Noteworthy among the dishes described are, e.g., aṅgarakarkarī (10.80–81),³⁴⁷ barbara (10.126–127), candrahāsā (10.87), harīsā (6.60–61),³⁴⁸ jalebī (10.122–125),³⁴⁹ karcārī (6.48–49), kāsāra (10.138–141),³⁵⁰ parpaṭa (6.39–40),³⁵¹ samosā (6.131–135),³⁵² sevikā (10.142–144),³⁵³ tāhaḍī (6.43–44),³⁵⁴ taradvaṭī (10.113–115), and veṭikā (10.82–84).³⁵⁵

Remarkable names of plants are bhairanḍa (8.91–92), caceṇḍa (8.42), d̥hehikā (8.185–186), gaulāla (5.34, 39 and 47),³⁵⁶ kohaḍa (8.101–102), makhāṇa (10.98),³⁵⁷ poyikā (8.114–117), teṇṭī (8.60–61), tiṇḍisa (8.46–47), and viṣāṇa (8.81–82).

The author

The genealogy of Kṣemaśarman,³⁵⁸ as recorded in the introductory verses, is as follows. He descended from Dvijarāja, a Sannāha(-brāhmaṇa) of the Bharadvājakula, father of the physicians Dharmadhara and Rāma. The latter was the father of Yati who had six sons: Yaśorāja, Mahārāja (a famous physician who served Śakeśvara), Prahlāda, Kāmarāja, Hrādani,³⁵⁹ and Tripurāri. Hrādani, who had studied Caraka, Suśruta and Vāgbhaṭa, had five sons: Manmatha, Jayaśarman, Vāmadeva, Paṇḍita and Sūryadāsa. Manmatha, a physician, had two sons, who were also physicians: Kṣemaśarman and Mallinātha. Kṣemaśarman, our author, was an expert in various sciences and served king Vikramasena. Kṣemaśarman's mother, Sītā, of the Nimbaśākhikula, became a sati after her husband's death. Kṣemaśarman's teacher was Sūryadāsa, the youngest brother of his father. One of the last verses of the *Kṣemakutūhala* (12.123) mentions the names of the six sons of Kṣemaśarman: Gopāla, Śivapāla, Mādhavavara, Nārāyaṇa, Rāma and Lakṣmaṇa.

Date

The date of completion of the *Kṣemakutūhala* is given in a verse at the end of the work (12.127)³⁶⁰ as the thirteenth day of the bright half of Kārtika in the year 1605 of the Vikrama era, i.e., A.D. 1549.

Lakṣmaṇa Paṇḍita

Lakṣmaṇa Paṇḍita³⁶¹ was the author of the *Yogacandrikā*,³⁶² also called *Vaidyaka-yogacandrikā*³⁶³ and *Gūḍhaprakāśikā*.³⁶⁴ This work, dealing with materia medica and therapeutics, contains 1,700 verses,³⁶⁵ arranged in thirty-eight chapters.

Authorities referred to in the *Yogacandrikā* are Caraka, Hārīta, Parāśara, and Suśruta.

Lakṣmaṇa's *Yogacandrikā* is one of the sources of Hariprapanna's *Rasayogasāgara*.³⁶⁶

Two more works ascribed to Lakṣmaṇa are a commentary on the *Raghuvamśa* called *Advaitasudhā*³⁶⁷ and the *Sāracandrikā*.³⁶⁸

Lakṣmaṇa was the son of Datta of the Brahmajñānin family. He had three elder brothers, Gaṇeśa, Raghunātha, and Rāma, and one younger brother, Viṭṭhala,³⁶⁹ and was a southerner, possibly a Mahārāṣṭra brāhmaṇa, who abandoned his property and went to Benares.³⁷⁰ Lakṣmaṇa studied medicine at Benares under the tuition of two brothers, Nāgeśa (or Nāganātha, the author of the *Nidānapradīpa*) and Nārāyaṇa (who wrote the *Jvaranirṇaya* and a commentary on Śāringadhara's *Trisati*), which implies that the *Yogacandrikā* dates from the sixteenth century.³⁷¹

Lokanātha

Lokanātha, a kāyastha, wrote, in 1568, the *Mallaprakāśa*,³⁷² a work ascribed to the author's patron, Malladeva of Yodhapura, who has been identified as Māladeva of Yodhpur, who reigned in the period 1551–1568.³⁷³ The *Mallaprakāśa* describes medicinal preparations, grouped together as ghṛtas, tailas, etc., against various diseases;³⁷⁴ the examination of the pulse is also dealt with.³⁷⁵ Other works by the same author are a *Kārajñāna*³⁷⁶ and a *Trīṭyajaivarāṣṭaka*.³⁷⁷

Lolimbarāja

Lolimbarāja was the author of four medical kāvyas, the *Camatkāracintāmaṇi*, *Vaidyajāvana* and *Vaidyāvataṃsa*, all three written in Sanskrit, and the *Vaidyakakāvya*, written in Marāṭhī. He also composed a religious poem in Sanskrit on the life of Kṛṣṇa, ending with the death of Kāṃsa, called *Harivilāsa*kāvya, and a poem in Marāṭhī with the title *Ratnakalācarita*.³⁷⁸

The *Camatkāracintāmaṇi*³⁷⁹ is a kāvya in 242³⁸⁰ ingenious verses of diverse metres,³⁸¹ which are addressed to the poet's beloved as a reply to her questions pertaining to med-

ical matters. The poem therefore abounds with skillful verses extolling female beauty and charms.

Chapter (vilāsa) one (ninety-three verses) has seven introductory verses, which mention the title of the work and a number of sources (Ātreya, Bheda, Bhoja, Hārīta, Parāśara); the remaining part deals with the treatment of fevers. Chapter two (thirty-eight verses) contains prescriptions against atisāra and grahaṇī. Chapter three (fifty verses) is about the therapy of a series of unconnected disorders (1–35) and women's diseases (36–50). The diseases mentioned in chapter four (forty-three verses) do not show any systematic arrangement at all. Chapter five (eighteen verses) is concerned with vājīkaraṇa.

The prescriptions of the *Camatkāracintāmaṇi* are simple and contain for the greater part ingredients which are well known from the classical texts.³⁸²

An abundance of pitta is called karālapitta (4.21).

Verses from the *Camatkāracintāmaṇi* form part of Trimalla's *Yogatarāṅgiṇī*³⁸³ and the *Yogarātnākara*.³⁸⁴ Nayanasukha's *Vaidyamanotsava* is said to have been influenced by the *Camatkāracintāmaṇi*.³⁸⁵

The *Vaidyājīvana*,³⁸⁶ regarded as Lolimbarāja's best poem,³⁸⁷ has the same structure as the *Camatkāracintāmaṇi*.³⁸⁸ It consists of 238 skillful verses of diverse metres,³⁸⁹ arranged in five chapters (vilāsa).

Chapter one (eighty-two verses) deals,³⁹⁰ after twelve introductory verses, with fevers,³⁹¹ chapter two (thirty verses)³⁹² with jvarātisāra, atisāra and grahaṇī, chapter three (forty-eight verses)³⁹³ with various disorders (1–37), women's diseases (38–46),³⁹⁴ and children's diseases (47–48), chapter four (fifty-four verses)³⁹⁵ with various disorders, and chapter five (twenty-four verses)³⁹⁶ with vājīkaraṇa.³⁹⁷ The materia medica differs from that of the *Camatkāracintāmaṇi* in including many inorganic substances, in particular for vājīkaraṇa purposes in a number of rasayogas (5.13–20).³⁹⁸ Religious elements in its therapy are rather rare (1.59; 5.23), but allusions to mythology are frequent. One of the formulae is called after the author's wife (ratnakalācūrṇa; 2.23). The only authority referred to is Parāśara (1.25).

The *Vaidyājīvana* is mentioned in Nidhi's *Yogasamuccaya*. The work is quoted in the *Āyurvedīya Khanijavijñāna*, *Bheṣajasamhitā*, Hanumatprasāda's commentary on the *Siddhabhaiṣajyamañjūṣā*, Hariprapanna's *Rasayogasāgara*, Jñārasarāmaśarman's *Anupānadarpaṇa*, Pratāpasimha's *Amṛtasāgara* and Jñārasarāma's version of this work, Trimalla's *Yogatarāṅgiṇī*,³⁹⁹ Vidyāpati's *Vaidyarahasya*,⁴⁰⁰ and the *Yogarātnākara*.⁴⁰¹ It is probably quoted as *Vaidyasamjivani* in Ananta's *Pratāpakalpadruma* and as *Vaidyakasaṃjivana* in Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*. The *Vaidyājīvana* was one of the sources of Raghunātha's *Nighaṇṭusamgraha* and the *Rasodhātatantra*. Modern works that have incorporated verses from the *Vaidyājīvana* are Yādavji Trikamji's *Rasāmṛta* and *Siddhayogasamgraha*,⁴⁰² and the *Vaidyakiya Subhāṣitāvalī*.⁴⁰³ The *Vaidyājīvana* has influenced Nayanasukha's *Vaidyamanotsava*,⁴⁰⁴ Raghunātha Paṇḍita's *Cikitsāmañjarī*, and Benīprasāda's *Lolamarāja*.⁴⁰⁵ The work was translated into Hindī verse by Bohare Īśvarīprasāda of Dhaulapura in 1842/43.⁴⁰⁶

Commentators on the *Vaidyājīvana*

Commentators on the *Vaidyājīvana* are: (1) Dāmodara alias Jñānadeva.⁴⁰⁷ A MS of his commentary dates from 1612/13.⁴⁰⁸

(2) Gosvāmin Harinātha, son of Manohara⁴⁰⁹ and grandson of Lakṣmīdāsa.⁴¹⁰ The title of his commentary is *Gūḍhārthadīpikā*.⁴¹¹ It is said to have been written in 1673/74.⁴¹² The author was a resident of Kuśapura on the banks of the Vi-tastā.⁴¹³ Harinātha is also sometimes credited with a *Bhuvaneśvarīstotrabhāṣya*,⁴¹⁴ *Śaṭpañcaviṃśakā*, *Svapnādhyāya*,⁴¹⁵ and *Hastapādasamudrikālakṣaṇāni*.⁴¹⁶

(3) Rudrabhaṭṭa,⁴¹⁷ son of Koneribhaṭṭa.⁴¹⁸ Rudrabhaṭṭa's genealogy was as follows:⁴¹⁹ Kṛṣṇabhaṭṭa, Kṛṣṇavaidya or Śrīkṛṣṇa⁴²⁰ of Māṇḍa family,⁴²¹ of Śaṭkheṭaka on the Godāvarī, dharmādhikārin of king Rāmadeva – Haribhaṭṭa or Hīrabhaṭṭa (a physician) – Viṣṇu – Koneribhaṭṭa⁴²² – Rudrabhaṭṭa; Viṣṇu's brother was Nārāyaṇa, author of the *Omākāragantha*.⁴²³

The earliest dated MS of Rudrabhaṭṭa's commentary, called *Dīpikā*,⁴²⁴ was completed in A.D. 1766.⁴²⁵ Rudrabhaṭṭa, who can be assigned to the seventeenth century because his father was the court physician of 'Abdu'l-Rahīm',⁴²⁶ is credited with five commentaries,⁴²⁷ written at the request of Mirzā Khān,⁴²⁸ as well as with a comprehensive work on medicine⁴²⁹ and a *Samnīpātakalikā*.⁴³⁰

Works and authors quoted by Rudrabhaṭṭa in his commentary on the *Vaidyājīvana* are:⁴³¹ Amara, Amitaprabha (2.19), *Anekārtha* (1.70; 2.10), *Anekārthadhvanimañjarī* (4.1), *Ārogyacintāmaṇi* (4.24), *asmatkṛtasārṅgadharaṭīkā* (4.4), Bakula (4.21), Bheda (1.6), Bhoja (1.6), Bhṛṅgu (1.6), *Cakradatta* (3.40), Caraka, *Dhvanimañjarī* (1.73), *Kāmasāstra* (1.61), *Mārkaṇḍeyapurāṇa* (1.2), *Nighaṇṭu* (1.18, 63, 69; 4.38), Ratnakalā (3.42), Ratnaprabhākāra (1.29), Suśruta, Vāgbhaṭa, Vaṅgasena (1.63; 2.5; 4.31), Viśva, Vopadevapaṇḍita (3.40), and Vṛnda (2.16).

(4) Sukhānandanātha,⁴³² pupil of paramahamṣapārivrājakācārya Hariharānandanātha. His commentary, called *Lolimbarājādīpikā*, was completed in 1863/64. The author may have been an inhabitant of Gujarāt, since he mentions some Gujarātī names of medicinal plants.⁴³³

Authorities and works quoted or referred to in the commentary are: Agniveśya (1.5), Amara (1.2, 3, 6, 33, 68; 3.16; 4.26), Bhāva (i.e., Bhāvamiśra; 3.34), Bhāvamiśra (1.62, 64, 75; 3.38), *Bhāvaprakāśa* (1.15, 38; 3.35, 38; 5.8, 20), *Bṛhadāranyaka* (5.20), Cakrapāṇidatta (1.26, 37, 46, 56, 59; 2.1, 4, 6; 3.18, 27, 37; 4.7, 12, 33), Cakrapāṇidattamiśra (3.38), Caraka (1.5, 10, 13, 46; 4.28), Divodāsa (5.21), Hārīta (1.5), Hemacandra (1.32, 57; 4.17; 5.20), Jaiyyaṭa (1.46), *Kośa* (1.11), *Kulārṇava* (5.20),⁴³⁴ Lāṭakanasūnu (i.e., Bhāvamiśra: 2.8), Mādhava (4.36),⁴³⁵ Mādhavakāra (1.43–44, 76),⁴³⁶ Manu (5.20), Mārkaṇḍeya (1.2), *Matsyapurāṇa* (1.3), Medinikāra (1.31, 41, 62, 66, 69, 70; 3.16), *Medinīkośa* (3.16), *Nighaṇṭu* (1.18; 2.10), *Nṛsimhapurāṇa* (2.20),⁴³⁷ *Sukhabodha* (5.20),⁴³⁸ Suśruta (1.5, 49; 4.28), Vāgbhaṭa (1.3, 5, 7, 8, 13, 49; 3.24), Vaṅgasena (1.59), Videha (1.75), *Viṣṇutilaka* (4.31),⁴³⁹ Viśva (1.1, 2, 6, 9),⁴⁴⁰ Yāska (5.20), and *Yogatāntra*.⁴⁴¹ (1.7).⁴⁴²

Sukhānanda's commentary contains a number of interesting explanations.⁴⁴³

(5) Bhagīratha,⁴⁴⁴ son of Harṣadeva of the Pīṭamuṇḍī family. Bhagīratha lived under Jagaccandra Kūrmācala; he called his commentary on the *Vaidyājīvana* *Jagacca-*

ndrikā,⁴⁴⁵ and that on Kālidāsa's *Raghuvamśa Jagaccandracandrikā*,⁴⁴⁶ in compliment to his patron.⁴⁴⁷

(6) Bhavānīśahāya.⁴⁴⁸ This author also wrote a commentary on the *Mādhavanidāna* and a *Yogacintāmaṇiṭippaṇa*.⁴⁴⁹

(7) Kṛṣṇapaṇḍita.⁴⁵⁰ A commentary called *Dīpikā*⁴⁵¹ is ascribed to Kṛṣṇapaṇḍita, son of Ammaṇapaṇḍita, who is referred to as śrīvijayapurādhiśa and vaidyapurandhara.⁴⁵² The introductory verse praises the author's father, Koneri, which indicates that it may be identical with Rudrabhaṭṭa's commentary.⁴⁵³

(8) Prayāgadatta. His commentary is called *Vijñānāṇandakarī*.⁴⁵⁴

(9) Tātā Sūryanārāyaṇa, son of Venkaṭeśvara; the commentary is called *Vidvadvidyarañjanī*.⁴⁵⁵

(10) Sumatidhīra, a Jain monk of the Kharataragaccha. The commentary dates from 1784/85.⁴⁵⁶

(11) Cainsukha, a Jain monk of the Kharataragaccha. The commentary, written in Rājasthānī, dates from about 1763/64.⁴⁵⁷

An elaborate anonymous commentary is also recorded.⁴⁵⁸

The *Vaidyāvataṃsa*⁴⁵⁹ is a short nighaṇṭu⁴⁶⁰ in 172 verses.⁴⁶¹ Unlike the *Camatkāracintāmaṇi* and the *Vaidyājīvana*, it is for the greater part written in simple Sanskrit.⁴⁶² It describes the medicinal properties of a series of dietetic substances and drugs,⁴⁶³ which are arranged as follows: fruits (4–21),⁴⁶⁴ vegetables (22–35), spices (36–50), various substances (51–108), grains and pulse (109–147), the flesh of some animals (148–150), dairy produce and the products of the sugarcane (151–169). Synonyms are given in a restricted number of instances, particularly in the verses dealing with various substances.⁴⁶⁵

Sources mentioned are Atritanaya (i.e., Ātreya), Caraka, Suśruta, and Vāgbhaṭa (2 and 170). Sources that may have been used, but not referred to by name are the *Dhānavantariya*-⁴⁶⁶ and *Rājanighaṇṭu*.⁴⁶⁷

The *Vaidyāvataṃsa* is quoted in the *Yogarātnākara*.⁴⁶⁸ It may also be quoted, as Lolimbarāja, in Śivadatta's commentary on his *Śivakośa*.

Noteworthy names of plants are: ābhābabbulikā (68), aśvabalā (36),⁴⁶⁹ babbūla (108), bhaṅgikā (66),⁴⁷⁰ bṛhacchatahivā (38), cāruka (123),⁴⁷¹ ḍaṅgarī (79),⁴⁷² dhūmavṛkṣa (= tamākhū; 59), ḍikemālī (55),⁴⁷³ gurusa (125), hastighoṣā (26),⁴⁷⁴ junhala (= yāvanāla; 121), jūrñākhyā (= yāvanāla; 121), khurasānapradeśajā yavānī (77),⁴⁷⁵ kolāmbikā (14), kṣupopodaka (74), kujavallī (= ḍikemālī; 55), makkā (= yāvanāla; 144), meḥārī (107),⁴⁷⁶ mṛgākṣī (81),⁴⁷⁷ nartaka (136),⁴⁷⁸ tamākhū (59),⁴⁷⁹ and ūvrasāra (105).⁴⁸⁰ Most of these plants are not prescribed in the *Camatkāracintāmaṇi* and the *Vaidyājīvana*. Opium is absent from the *Vaidyāvataṃsa*, although khākhasavalkala is employed as a medicinal substance in the *Camatkāracintāmaṇi* (5.16).

The *Vaidyakakāvya*⁴⁸¹ is a poem in ninety-five verses on the therapy of a number of diseases.⁴⁸² In contradistinction to most medical works, fever is the last disease dealt with. Some of the formulae closely resemble yogas found in the *Camatkāracintāmaṇi* or *Vaidyājīvana*, but the major part of them is new. The *Vaidyakakāvya* has not been

written in the form of a dialogue and the name of the poet's wife is not mentioned in it.

Lolimbarāja is mentioned as one of the sources of the *Amṛtasāgara*. Lolimbarāja is quoted in Lakṣmīdhara's *Cikitsāsamgraha*, Veṇidatta's *Padyavenī*,⁴⁸³ the *Subhāṣitasārasamuccaya*,⁴⁸⁴ and Siddhichandra's *Sūktiratnākara*;⁴⁸⁵ he is referred to by the Marāṭhī saint Devadāsa.⁴⁸⁶ The *Harivilāsakāvya* of Lolimbarāja has influenced Rudrakavi in composing his *Rāṣṭraudhavamśamahākāvya*,⁴⁸⁷ completed in A.D. 1596.⁴⁸⁸

The author

Lolimbarāja⁴⁸⁹ was a son of Divākara⁴⁹⁰ and a resident of the town Junara⁴⁹¹ in the Poona district of Mahārāṣṭra. He married the daughter of a Muslim sūbedār (governor of a province),⁴⁹² called Murāsā, whose name was changed into Ratnakalā after becoming his wife,⁴⁹³ and whose beauty, learning, etc., are eulogized in numerous verses of Lolimbarāja's works.⁴⁹⁴ Lolimbarāja was a courtier of one or more royal persons,⁴⁹⁵ as shown by epithets conferred upon himself⁴⁹⁶ and by references to a king called Hari, son of Sūrya,⁴⁹⁷ on whose request he composed the *Harivilāsakāvya*.⁴⁹⁸ This Hari may have been some minor ruler since no important king of this name is known from the period of Lolimbarāja's literary activity.⁴⁹⁹ After Ratnakalā's death, when the poet was about fifty years of age, he turned to an ascetic mode of life and became a sādhu.⁵⁰⁰

Lolimbarāja appears to have belonged to those Mahārāṣṭra brāhmaṇas who especially study the Mādhyamīna recension of the *Suklayajurveda*.⁵⁰¹ He was especially devoted to the goddess Saptasṛṅgī,⁵⁰² who has a shrine on the slopes of the mountain Sahya in the Nāsik district.⁵⁰³

Lolimbarāja's fame as a poet appears from quotations in anthologies. That he was aware of his excellence in writing poetry is evident from a series of laudatory epithets found in his own works.⁵⁰⁴ He claims that he was not only an expert in poetry and medicine,⁵⁰⁵ but also in music.⁵⁰⁶

The chronological order of Lolimbarāja's works has been established by B. Tripāthī as follows:⁵⁰⁷ (1) *Vaidyāvataṃsa*, (2) *Vaidyājīvana*, (3) *Camatkāracintāmaṇi*, (4) *Vaidyakakāvya*, (5) *Ratnakalācarita*, (6) *Harivilāsakāvya*.

Date

Various suggestions have been put forward regarding the period in which Lolimbarāja lived and the dates of composition of his works. Some authorities are of the opinion that the author of the *Harivilāsa* was a contemporary of king Bhoja.⁵⁰⁸ The untenability of this view has been demonstrated by B. Tripāthī.⁵⁰⁹ The arguments brought forward by P.K. Gode⁵¹⁰ in trying to establish that the author of the *Harivilāsa* was different from and lived about thirty years earlier than the Lolimbarāja who composed the other works have also been invalidated by B. Tripāthī,⁵¹¹ thus proving that one and the same Lolimbarāja wrote the four medical works, the *Ratnakalācarita* and the *Harivilāsakāvya*. This Lolimbarāja is assigned to the period A.D. 1310–1370 by P. Hymavathi,⁵¹² to 1538–1608 by B. Tripāthī,⁵¹³ to 1578–1648 by L.R. Pāṅgarkar,⁵¹⁴ to about 1625 by P.V. Sharma,⁵¹⁵ and to the seventeenth century by V.L. Bhāve.⁵¹⁶

The exact period of his literary activity depends on the dates of MSS of his compositions and their reliability. Two MSS of the *Harivilāsakāvya*, preserved respectively in the Tanjore and BORI collections, are said to state that this work was composed in 1583/84.⁵¹⁷ The earliest dated MS of the *Vaidyajīvana* was completed in 1607/08;⁵¹⁸ a MS of this poem with the commentary of Jñānadeva alias Dāmodara was completed in 1612/13.⁵¹⁹

The period of Lolimbarāja's literary activity may therefore have been the last quarter of the sixteenth century if the evidence referred to is reliable. B. Tripāthī, being convinced that the style and structure of the *Harivilāsakāvya* prove it to be the most mature of Lolimbarāja's works, written when he may have been forty-five years of age, has concluded that he was born in 1538, but the onus of this assertion has to be left on this author. The proposed date of Lolimbarāja does not conflict with the chronology of authors quoting him or influenced by him.

Moreśvara

Moreśvara,⁵²⁰ son of the physician Māṇikyabhaṭṭa⁵²¹ or Māṇikabhaṭṭa,⁵²² and a resident of Ahaṃmadanagara,⁵²³ wrote his *Vaidyāmṛta*⁵²⁴ in 1546/47.⁵²⁵

This work is a short therapeutic treatise of about 180 stanzas,⁵²⁶ divided into four chapters (alaṃkāra). The order of the diseases is for the greater part the same as in the *Mādhavanidāna*; prescriptions against pāṇtyaya, unmāda, hṛdroga, and mūtrāghāta appear to be absent;⁵²⁷ two recipes against jvarātisāra occur in the work (1.22–23); a pauṣṭika-, stambhana-, and drāvaṇayoga are added between the prescriptions against prameha and medoroga.

The author states that his therapy is partly based on his own experience, partly on that of his teacher, and partly again on medical treatises (4.21); recipes derived from his teacher are sometimes specified as such (1.28; 2.8); one recipe is said to be decidedly effective although not found in authoritative texts (1.22).⁵²⁸

Moreśvara's work contains mainly āyurvedic prescriptions, but he also included some rasayogas. The recitation (kīrtana) of the hymn in praise of Śītalādevī is said to cure viṣphoṭa and not, as usual, masūrī (3.37). The materia medica does not contain noteworthy substances, apart from isabagola (1.22)⁵²⁹ and riṅgaṇī (1.12).⁵³⁰ Once a disorder called jhañjhā (1.7)⁵³¹ is referred to.

Authorities mentioned are Ātreya, Pārāśara, Suśruta, and Vāgbhaṭa (1.1–2).

Moreśvara's *Vaidyāmṛta* is quoted in Hariprapanna's *Rasayogasāgara* and in the *Tāmbūlamanjari*.

Moreśvara's *Vaidyāmṛta* is said to be one of the sources of Raghunāthajī's *Nighaṇṭusamgraha*. A *Vaidyāmṛta*⁵³² is one of the sources of Raṅgajyotirvid's *Vicārasudhākara*.

Moreśvara is also credited with a *Nidānasiddhi*, which may have formed part of a larger work called *Cikitsāsāra*.⁵³³

A commentary on Moreśvara's *Vaidyāmṛta* was written by Jyotiḥsvarūpa, pupil of Bhagavadbodhasvarūpa.⁵³⁴

Nāganātha

Nāganātha⁵³⁵ was the author of the *Nidānapradīpa*,⁵³⁶ a rather extensive textbook of pathology (nidāna), written in śloka.⁵³⁷ Though sometimes regarded as a commentary on the *Mādhavanidāna*,⁵³⁸ it is an independent treatise.

Authorities and works quoted or referred to are: Agniveśa, *Aṣṭāṅgahṛdaya*, Bhaṭṭarakahariścandra, Bhoja, Cakra, Candrikākāraka, Caraka, Dṛḍhabala, Gadādhara, Gayadāsa, Guṇākara, Hariścandra, Hārīta, Īśāna, Jaijñāta, Jātūkarṇya, Kārttika, Khāraṇāda, Khāraṇādi, Kṣīrapāṇi, Mādhava, Nāgabhartar, Nāgārjuna, *Smṛtisamgraha*,⁵³⁹ Suśruta, Vāgbhaṭa, Vāpyacandra, Videha, Viśvakośa, Vṛddhabhoja, and Vṛddhavāgbhaṭa.

Nāganātha was the eldest son of Kṛṣṇabhaṭṭa,⁵⁴⁰ -paṇḍita, or -sūri and a descendant of a family of physicians. He was probably the elder brother and teacher of Nārāyaṇa, who wrote the *Jvaranirṇaya* and a commentary on Śārṅgadhara's *Triṣaṭī*,⁵⁴¹ and also one of the teachers of Lakṣmaṇa, the author of the *Yogacandrikā*.⁵⁴² Since the *Triṣaṭī* belongs to the fifteenth century, Nārāyaṇa and his brother Nāganātha cannot be earlier and may belong to the sixteenth century. The earliest MS of the *Nidānapradīpa* dates from 1684/85.⁵⁴³ P.V. Sharma⁵⁴⁴ suggested that Nāganātha may have been the great-grandfather of Koṇṛibhaṭṭa, the father of Rudrabhaṭṭa, the author of commentaries on the *Śārṅgadharaśaṃhitā* and Lolimbarāja's *Vaidyajīvana*, but this would conflict with the date of Rudrabhaṭṭa, who lived about A.D. 1600.

Nārāyaṇa

Nārāyaṇa was the author of a remarkable and interesting monograph on fevers, called *Jvaranirṇaya*.⁵⁴⁵

Contents

The treatise consists of 405 verses,⁵⁴⁶ for the greater part śloka, arranged in five chapters (prakaraṇa). It deals exclusively with the pathology of fevers, not with their treatment.

The opening verse is a maṅgala addressed to Gopāla, i.e., Kṛṣṇa. Chapter one (upodghātaprakaraṇa; forty verses) is about general principles of pathology and therapy. Chapter two (prthagjātaprakaraṇa; sixty-two verses) treats, as its title indicates, of fevers caused by one doṣa (44–51: anilajvara; 52–54: pittajvara; 55–56: kaphajvara).⁵⁴⁷ Apart from this, it is also concerned with fever in general, its nidāna, saṃprāpti, prodromes and symptoms (1–24), its number of types (25 and 32–35), and with irregular fevers (viśamajvara: 36–43). Chapter three (dvandvajaprakaraṇa; twenty-five verses) has fevers by two doṣas for its subject. The fourth and longest chapter (tridoṣajaprakaraṇa; 241 verses) is about fevers by three doṣas. It distinguishes and describes prakṛtisamasamaveta types (2–15)⁵⁴⁸ and numerous vikṛtivyāmasamaveta types. After enumerating the symptoms of saṃnipāta fever in general (41cd–47),⁵⁴⁹ and those of the fever called abhinyāsa or hataujas (48–51ab),⁵⁵⁰ a verse is inserted about the swelling at the root of the ear which appears towards the

end of a samnipāta fever (51cd–52ab),⁵⁵¹ whereupon the subject of abhinyāsa fever is continued, distinguishing several varieties of it (52cd–57ab). Then three series of thirteen samnipāta fevers of the vikṛtviṣamasamaveta type are characterized: the first series (58–101ab) is said to be taken from the *Bhālukitantra*;⁵⁵² the second series (102–115) occurs, in a different order, in Śāringadhara's *Triṣaṭī* (175–187);⁵⁵³ the third series (119–138ab) is also found in that text.⁵⁵⁴ Chapter four includes descriptions of the fevers called madhara (139cd–142), pralepaka (143–144),⁵⁵⁵ and vātabalāsaka (145),⁵⁵⁶ the śītapūrva and dāhapūrva fevers, etc. (148cd–160),⁵⁵⁷ the irregular fevers together with their viparyaya types and their symptoms when they are located in the seven dhātus of the body (161–226), saumya and tikṣṇa fevers (227–229), the stages of fever (230–236), and the signs of release from fever (237–241). Chapter five (āgantujaprakaraṇa; thirty-seven verses) deals with exogenous (āgantū) fevers (1–14), curability and incurability of fevers (15–17), and signs indicating the approach of death (18–33).

Sources indicated by the author are: Bhāluki (4.101 and 214), Caraka, (1.2; 5.37), Jejjāta (3.20; 4.176), Khāraṇādi (4.36–37),⁵⁵⁸ Mādhava (4.153), muni (i.e., Vāgbhaṭa; 4.197), Nāgabhartar (4.166), ṛṣi (i.e., Vāgbhaṭa; 1.33), sāmpradāyikāḥ (4.212), Suśruta (3.19; 4.36; 5.37), tāntrikāḥ (4.53), tārikikāḥ (2.21), Vāgbhaṭa (4.16, 41, 153), and Vṛddhasuśruta (4.102). The *Carakasamhitā*, *Suśrutasaṃhitā*, *Aṣṭāṅgaḥṛdayasaṃhitā*, *Aṣṭāṅgasamgraha* and *Mādhavanidāna* were, however, utilized on a larger scale than appears from the above list.⁵⁵⁹ In a number of instances the author refers to his own view as opposed to that of others.⁵⁶⁰

Special features

The author distinguishes first the usual six types of irregular fever: satata, prātyahika (= anyedyuṣka), tṛtīyaka, caturthaka, tṛtīyakaviparyaya and caturthakaviparyaya (2.38–39), but describes later four viparyaya types: satata-, anyedyuṣka-, tṛtīyaka-, and caturthakaviparyaya (4.186–189).⁵⁶¹ Fevers by vāta are said to be of three varieties: satata, suddhasatata and suddhaprātyahika (2.42). Fevers by two doṣas may present the same three varieties, with the exception of the fever by kapha and pitta (3.14), because vāta is absent there. Tṛtīyaka and caturthaka, however, are never caused by two doṣas, but always by three (3.24). The distinction between prakṛtisaṃsamaveta and vikṛtviṣamasamaveta fevers,⁵⁶² and that between prakṛta and vaikṛta types,⁵⁶³ have an important place throughout the work, as well as the periods of time during which a particular fever presents itself.⁵⁶⁴ The madhara fever, characterized by eruptions in the throat and on the chest, together with lassitude (tandrā), and occurring in Mahārāṣṭra, is described as an example of those fevers which were omitted by the ṛṣis and ācāryas (4.138–142).⁵⁶⁵

The author

At the end of the work (5.36), the author mentions that his name is Nārāyaṇa, that his father instructed him in the śāstras, and that his brother was his preceptor in medicine. According to the colophon, the author's name is Nārāyaṇa Paṇḍita and his father's Kṛṣṇa Paṇḍita.⁵⁶⁶ These indications suffice to identify him as the younger brother of Nā-

ganātha, who wrote the *Nidānapradīpa*, and as one of the teachers of Lakṣmaṇa Paṇḍita, who composed the *Yogacandrikā*.⁵⁶⁷ Besides the *Jvaranirṇaya*, Nārāyaṇa wrote a commentary on Śāringadhara's *Triṣaṭī*.

Date

Nārāyaṇa can be assigned to the sixteenth century, since he was the younger brother of Nāganātha and one of the teachers of Lakṣmaṇa Paṇḍita. This date is corroborated by his commentary on the *Triṣaṭī*, because the latter work was written during the fifteenth century.

The Rājanighaṇṭu or Nighaṇṭurāja

The *Rājanighaṇṭu*⁵⁶⁸ or *Nighaṇṭurāja*,⁵⁶⁹ also called *Abhidhānacūḍāmaṇi*,⁵⁷⁰ is the largest extant lexicon of materia medica; it deals with the names and properties of medicinal substances, as well as with a series of related subjects.

Contents⁵⁷¹

The work consists of about 3,300 verses,⁵⁷² arranged in twenty-two chapters (varga), preceded by an introduction (prastāvanā; twenty-three verses), and followed by a section on ekārthas and anekārthas (258 verses). One of the introductory verses (3) contains a salutation addressed to Śiva, Brahmā, Indra, the Aśvins, Ātreya,⁵⁷³ Dhanvantari, Caraka, and Suśruta.

The author declares to have collected all those names of medicinal substances which are useful to a physician, regardless whether they are of Sanskrit, Prakrit, or Apabhraṃśa origin (10). He announces his intention to describe the drugs according to their traditional usage (rūḍhi), svabhāva, local names (deśyokti), special characteristics (lāñchana), names based upon similarities (upamā), vīrya, and names employed in foreign countries (itarāhvaya) (13). He adds that he has taken into consideration their names in the languages of Kaṇṇāṭa and Mahārāṣṭra, and that he regards it as useful to know their names in the languages of Āndhra and Lāṭā.⁵⁷⁴ (18). A short table of contents is found at the end of the introduction (20–21). The first chapters have no parallel in other nighaṇṭus.

Chapter one (ānupādīvarga; thirty-nine verses) is concerned with the characteristics of the various types of country (deśa) and soil (kṣetra), the deities presiding over the types of soil, the characteristics and uses of trees and other kinds of plants and their products as dependent on the type of soil they are growing on, the definitions of the five classes of plants, the characteristics of plants considered to be of the male, female or neuter gender, and the relationship between parts of plants and the five mahābhūtas. Chapter two (dharanyādīvarga; seventy-one verses) deals with synonyms for earth, mountain, forest, etc.; it also contains a list of nakṣatravṛkṣas.⁵⁷⁵

Chapters three to thirteen contain enumerations of the names and properties of medicinal substances, arranged in the following groups: guḍūcyādi-,⁵⁷⁶ śatāhvādi-,⁵⁷⁷ parpaṭādi-,⁵⁷⁸ pippalyādi-,⁵⁷⁹ mūlakādi-,⁵⁸⁰ śālmalyādi-,⁵⁸¹ prabhadrādi-,⁵⁸² karavīrādi-,⁵⁸³ āmrādi-,⁵⁸⁴ candanādi-,⁵⁸⁵ and suvarṇādīvarga.⁵⁸⁶

Chapters fourteen to seventeen are about articles of food: water, the sugarcane and its products, types of sugar derived from other plants than the sugarcane, honey, and alcoholic drinks (chapter fourteen: *pāṇyādivarga*); milk and other dairy produce, *kāñjika* and similar products of acid fermentation, urines and oils (chapter fifteen: *kṣīrādivarga*); grain and pulse (chapter sixteen: *śālyādivarga*); meat (chapter seventeen: *māṃsādivarga*).

Chapter eighteen (*manuṣyādivarga*) is about names of human beings, anatomical terms, and some related subjects, chapter nineteen (*siṃhādivarga*) about the names of animals, chapter twenty (*rogādivarga*) about the names of diseases, about medicinal preparations, the tastes and their combinations, etc., chapter twenty-one (*sattvādivarga*) about the three *guṇas* and the character of human beings dominated by one of these, the three *doṣas* and the constitutions, weights and measures, divisions of time, the quarters of the sky, etc., and chapter twenty-two (*miśrakādivarga*) about groups of medicinal substances.

The work ends with *ekārthas* and *anekārthas*, the latter being divided into groups of names having two up to eleven meanings. These lists of *ekārthas* and *anekārthas* pose a number of problems since some of the *ekārthas* have more than one meaning in the *Nighaṇṭu*,⁵⁸⁷ while, moreover, some synonyms figuring in these lists are not found there.⁵⁸⁸

The style of the *Rājanighaṇṭu*, especially that of the *prastāvanā* and the concluding verses of each *varga*, is rather ornate. The arrangement of the medicinal substances differs considerably from that found in the *Dhanvantarīyanighaṇṭu*, apart from the contents of a few *vargas*, notably the *śatāhvādi-* and *candanādivarga*. The strings of synonyms, usually longer than those of the *Dhanvantarīyanighaṇṭu*, are rarely identical with those of the latter work,⁵⁸⁹ whereas the verses describing the properties of drugs more often are.⁵⁹⁰ A conspicuous feature is the mention of the number of synonyms at the end of each series.

The *Rājanighaṇṭu* describes more medicinal substances than the *Dhanvantarīyanighaṇṭu*⁵⁹¹ and distinguishes a larger number of varieties. On the other hand, a small number of drugs included in the *Dhanvantarīyanighaṇṭu* are absent from the *Rājanighaṇṭu*, e.g., *śvāsāri* (*Dhanvantarīyanighaṇṭu* 1.72), *kapaṭa* (1.82–83), *guṇṭha* (1.83–84), *kāsaḥni* (1.98–100), *vijayā* (1.130–131), *śvetapuṣpī* (1.252–253), the varieties of *yavāni* (2.93–94), *girisindūra* (3.103–104), *vaṭasaugandhika* (3.114–115), *jalapippalī* (4.64–65), and *kiṅkirāta* (5.156–158). The compilatory character of the *Rājanighaṇṭu* is, in the same way as in the *Dhanvantarīyanighaṇṭu*, apparent from quotations,⁵⁹² which are, however, less frequent than in the latter work.

Sources mentioned by the author of the *Rājanighaṇṭu* in the introductory verses are: the *Dhanvantarīyanighaṇṭu*, the works of Madana⁵⁹³ and Halāyudha,⁵⁹⁴ the *Viśvaprakāśa*,⁵⁹⁵ the *Amarakoṣa*, and the *Śeṣarāja*.⁵⁹⁶ He states explicitly that *Dhanvantari*'s treatise is his chief authority and model. Some more works referred to are *Brhatsuśruta*, *Nārādīya* (tantra), and *Nārāyaṇī*.⁵⁹⁷

The *Rājanighaṇṭu* is quoted or referred to in *Ambikādatṭaśāstrin*'s commentary on the *Rasendrasārasaṃgraha*, Baladeva Prasāda Miśra's *Āyurvedacintāmaṇi*, Bhānuji Dikṣita's commentary on the *Amarakoṣa*,⁵⁹⁸ the *Brhannighaṇṭuratanākā-*

ra,⁵⁹⁹ *Cūḍāmaṇiśra*'s *Rasakāmadhenu*, *Gulrājśarmamiśra*'s commentary on the *Āyurvedaprakāśa*,⁶⁰⁰ *Hārānacandra*'s commentary on the *Suśrutasaṃhitā*, *Haridattaśāstrin*'s commentary on the *Rasatarāṅgiṇī*, *Indu*'s *Śaśilekhā* on the *Aṣṭāṅgasamgraha*,⁶⁰¹ *Jīvānandavidyāśāgara*'s commentaries on *Gopālakṛṣṇa*'s *Rasendrasārasaṃgraha* and *Kaṇāda*'s *Nāḍivijñāna*, *Khare*'s commentary on the *Rasaratnasamuccaya*, *Lakṣmīrāma*'s commentary on the *Siddhabheṣajamaṇimālā*, *Mādhava*'s *Āyurvedaprakāśa*, the *Pāradasaṃhitā*, *Raghunātha*'s *Bhojanakutūhala*,⁶⁰² the *Śāligrāmanighaṇṭubhūṣaṇa* of the *Brhannighaṇṭuratanākara*, *Āśubodha* and *Nityabodha Senagupta*'s commentary on the *Rasaratnasamuccaya*,⁶⁰³ *Priyavrat Śarmā*'s auto-commentary on his *Dravyagūṇasūtra*, *Śivadattamiśra*'s commentary on his *Śivakoṣa*,⁶⁰⁴ the *Tāmbūlamāñjarī*, the *Smṛtyarthasāgara*,⁶⁰⁵ *Yādavjī Trikamjī*'s *Rasāmṛta*, the *Yogaratanākara*,⁶⁰⁶ and *Yogīndranāthasena*'s commentary on the *Carakasamhitā*.⁶⁰⁷ It is quoted as *Abhidhānacūḍāmaṇi* in *Kṛṣṇadatta*'s commentary on *Trimalla*'s *Śataśloka*.

Naraharipaṇḍita is quoted in *Priyavrat Śarmā*'s auto-commentary on his *Dravyagūṇasūtra*. *Narahari* is mentioned in *Śailendrasimha*'s *Vaidyacintāmaṇibhaiṣajyasamgrahaya*.

Special features

The number of medicinal substances described in the *Rājanighaṇṭu* and absent from the *Dhanvantarīyanighaṇṭu* is too large to be enumerated.

Some of the more interesting new plants added are: *agnidamanī* (*śatāhvādi* 59–61),⁶⁰⁸ *āhulya* (*śatāhvādi* 167–168),⁶⁰⁹ *aparvadaṇḍa* (*śālmalyādi* 77–78),⁶¹⁰ *asiśimbī* (*mūlakādi* 183–184),⁶¹¹ *aśvakātharā* (*parpatādi* 114–115),⁶¹² *bheṇḍā* (*śatāhvādi* 26),⁶¹³ *bhṛṅgāhvā* (*mūlakādi* 47),⁶¹⁴ *brahmadandī* (*parpatādi* 133),⁶¹⁵ *caṇikā* (*śālmalyādi* 147),⁶¹⁶ *dharāṇikanda* (*mūlakādi* 91–92),⁶¹⁷ *dhūmrapatrā* (*parpatādi* 34–35),⁶¹⁸ *ekavīra* (*śālmalyādi* 17–18),⁶¹⁹ *gaṅgāpatrī* (*karavīrādi* 162),⁶²⁰ *gomūtrikā* (*śālmalyādi* 128),⁶²¹ *gorakṣadugdhī* (*parpatādi* 142–143),⁶²² *gorakṣī* (*parpatādi* 94–95),⁶²³ *guṇḍāsinī* (*śālmalyādi* 148–149),⁶²⁴ *hastikanda* (*mūlakādi* 80–82),⁶²⁵ *hastīśuṇḍī* (*parpatādi* 77),⁶²⁶ *hemā* (*guḍūcyādi* 42–44),⁶²⁷ *himāvalī* (*pippalyādi* 245–246),⁶²⁸ *jambū* (*parpatādi* 84–85),⁶²⁹ *jaraṇadrūma* (*prabhadrādi* 81–82),⁶³⁰ *jhaṇḍū* (*parpatādi* 141),⁶³¹ *jhiñjhirīṭā* (*śatāhvādi* 201–202),⁶³² *kaivartikā* (*guḍūcyādi* 119–120),⁶³³ *kāmavṛddhi* (*śatāhvādi* 196–197),⁶³⁴ *kaṇṭapunkhā* (*śatāhvādi* 74),⁶³⁵ *karajodī* (*mūlakādi* 121),⁶³⁶ *kārī* (*śālmalyādi* 64–65),⁶³⁷ *karṇasphoṭā* (*guḍūcyādi* 136–137),⁶³⁸ *karuṇī* (*karavīrādi* 105–106),⁶³⁹ *kaṭvī* (*guḍūcyādi* 138–139),⁶⁴⁰ *kevikā* (*karavīrādi* 115–116),⁶⁴¹ *kolakanda* (*mūlakādi* 83–84),⁶⁴² *kurī* (*śālyādi* 138),⁶⁴³ *kuṭumbinī* (*parpatādi* 78–80),⁶⁴⁴ *mahāpiṇḍī* (*prabhadrādi* 140–141),⁶⁴⁵ *majjara* (*śālmalyādi* 133),⁶⁴⁶ *mākandī* (*mūlakādi* 42–43),⁶⁴⁷ *mālākanda* (*mūlakādi* 97–98),⁶⁴⁸ *manthānaka* (*śālmalyādi* 136),⁶⁴⁹ *māyāphala* (*pippalyādi* 259),⁶⁵⁰ *mudgara* (*karavīrādi* 77–78),⁶⁵¹ *nakhanīspāvīkā* (*mūlakādi* 192),⁶⁵² *niḥśreṇikā* (*śālmalyādi* 130),⁶⁵³ *nīlāmī* (*śatāhvādi* 176),⁶⁵⁴ *pācī* (*karavīrādi* 163–164),⁶⁵⁵ *pakvāṇḍa* (*śālmalyādi* 43),⁶⁵⁶ *pallivāha* (*śālmalyādi* 137),⁶⁵⁷ *paṇyāndhā* (*śālmalyādi* 139–141),⁶⁵⁸ *peū* (*mūlakādi* 48),⁶⁵⁹ *putradā* (*śatāhvādi* 159–160),⁶⁶⁰ *putradātṛī* (*guḍūcyādi* 142–143),⁶⁶¹ *sākuruṇḍa* (*pippalyādi* 243–244),⁶⁶² *samudraphala* (*pippalyādi* 216–217),⁶⁶³ *sarpīṇī* (*parpatādi* 125),⁶⁶⁴ *śaśāṇḍulī* (*mūlakādi* 217–218),⁶⁶⁵ *śilpikā* (*śālmalyādi* 129),⁶⁶⁶ *śimṛḍī* (*śatāhvādi* 164–

165),⁶⁶⁷ *śolī* (mūlakādi 44),⁶⁶⁸ *śrītāla* (prabhadrādi 95–96),⁶⁶⁹ *śrīvālī* (śālmalyādi 74–75),⁶⁷⁰ *śūlī* (śālmalyādi 150–151),⁶⁷¹ *svanūlī* (śātāhvādi 162),⁶⁷² *śvetā* (parpatādi 132),⁶⁷³ *śvetāmlī* (śātāhvādi 175),⁶⁷⁴ *tairinī* (śātāhvādi 127),⁶⁷⁵ *takrahvā* (śātāhvādi 161),⁶⁷⁶ *taratī* (śālmalyādi 73),⁶⁷⁷ *ukhala* (śālmalyādi 125),⁶⁷⁸ *uṣṭrakāṇḍī* (karavīrādi 139–140),⁶⁷⁹ *viṣṇukanda* (mūlakādi 89–90),⁶⁸⁰ and *vṛścikā* (parpatādi 126).⁶⁸¹

New varieties, added by the author of the *Rājanighaṇṭu* to those described in the *Dhanvantariyanighaṇṭu*, are also rather numerous. Some of these are: *ari* (a variety of *khadira*; śālmalyādi 30),⁶⁸² *bhūtumbī* (a variety of *alāmbunī*; mūlakādi 167–168),⁶⁸³ *brhājīvanī* (a variety of *jīvanī*; guḍūcyādi 40–41),⁶⁸⁴ *catuspatrī* (a variety of *pāṣāṇabhedaka*; parpatādi 45–46),⁶⁸⁵ *cīṇākarkaṭikā* (a variety of *trapusa*; mūlakādi 213–214),⁶⁸⁶ *gorakṣatumbī* (a variety of *alāmbunī*; mūlakādi 162–163),⁶⁸⁷ *kaidarya* (a variety of *nimba*; prabhadrādi 13–14),⁶⁸⁸ *kaliṅga* (a variety of *trapusa*; mūlakādi 169–170),⁶⁸⁹ *karkaṭa* (a variety of *vayasthā*; āmrādi 198–199),⁶⁹⁰ *karkaṭī* (a variety of *trapusa*; mūlakādi 202–204),⁶⁹¹ *kāṣṭhadhātṛī* (a variety of *vayasthā*; āmrādi 160–161),⁶⁹² *kṣīratumbī* (a variety of *alāmbunī*; mūlakādi 164–166),⁶⁹³ *mahānīlī* (a variety of *nīlī*; śātāhvādi 84–85),⁶⁹⁴ *mṛgākṣī* (a variety of *trapusa*; mūlakādi 178–180),⁶⁹⁵ *nīlapunarnavā* (a variety of *punarnavā*; parpatādi 121–122),⁶⁹⁶ *sarpatanu* (a variety of *brhātī*; śātāhvādi 26–27),⁶⁹⁷ *śilāvalkā* (a variety of *pāṣāṇabhedaka*; parpatādi 43–44),⁶⁹⁸ *śvetabṛhātī* (a variety of *brhātī*; śātāhvādi 28–29),⁶⁹⁹ *tāmrakaṇṭaka* (a variety of *khadira*; śālmalyādi 26–27),⁷⁰⁰ *vaṭapatrī* (a variety of *pāṣāṇabhedaka*; parpatādi 41–42),⁷⁰¹ and *viṭkhadira* (a variety of *khadira*; śālmalyādi 28–29).⁷⁰²

Chapter nineteen is about the names and their synonyms of forty-eight animals. Interesting among these are, for example: *brāhmaṇī* (8),⁷⁰³ *jāhaka* (10),⁷⁰⁴ *karṇajalūkā* (13),⁷⁰⁵ *kīṭikā* (46),⁷⁰⁶ *kokaḍa* (5),⁷⁰⁷ *maṅkora* (47), *matkuṇa* (17),⁷⁰⁸ *pakṣmayūkā* (44),⁷⁰⁹ *pallī* (11),⁷¹⁰ three kinds of *pipīlikā* (14–16),⁷¹¹ *ṣaḍbindukṭā* (48), *śvetayūkā* (45),⁷¹² *tailakṭā* (39), and *yūkā* (43).⁷¹³

Chapter twenty mentions two series of the eight divisions (*aṣṭāṅga*) of *āyurveda*: (1) *dravyābhīdhāna*, *gadaniścaya*, *kāya*, *saukhya*, *śalyādi*, *bhūtanigraha*, *viṣanigraha*, *bālavaidya* (20.42); (2) *śalya*, *śālākya*, *kāya*, *bhūta*, *viṣa*, *bāla*, *rasāyana*, *vṛṣya* (20.43). Noteworthy names of disorders from the same chapter are, for example: *hrdgranthi* = *hrdvraṇa* (24), *jātharagranthi* = *gulma* (10), *ksudrasphoṭa* = *kañcikā* (7), *lūtā* = *carmavraṇa* = *vṛkka* (11), *pītasphoṭa* = *pāmā* (7), *pramīlā* = *tandrā* (28), *prṣṭhagranthi* = *gaḍu* (10), *śākhāpitta* (27), *sacivāmaya* = *visarpa* (3), *śikhin* = *śvāsa* (6), *sūkṣmasphoṭa* = *vicarcikā* (7), *śuṇṭhikāsphoṭa* = *saṃcārī* (7), *tunda* = *sthaviṣṭha* (22), *udanyā* = *trṣṇā* (17), *utprāṇa* = *śvāsa* (14).

Chapter twenty-two enumerates three groups of *lohas* (metals): the three *lohas*: *suvarṇa* (gold), *rajata* (silver), *tāmra* (copper) (22.11); the five *lohas*: the three *lohas*, to which *vaṅga* (tin) and *nāga* (lead) are added (22.11); the eight *lohas*: the five *lohas*, to which *kānta*, *muṇḍaka* and *tikṣṇaka* (varieties of iron) are added (22.14). The eight *mahārasas* are: *darada*, *pārada*, *sasya*, *vaikrānta*, *kānta*, *abhraka*, *mākṣika*, and *vimāla* (22.15). The eight *uparasas* are: *khecara*, *añjana*, *kankuṣṭha*, *gandha*, *āla*, *gairika*, *kṣiti*, and *śaileyāñjana* (22.16). The *sāmānyarasas* (= *sādhāraṇarasas*) are: *kampilla*, *gaurī*, *capala*, *kaparda*, *śaila*, *sindūraka*, *vahnijāra*, and *bodaraśṛṅga* (22.17). The ten kinds of *kṣāra* derive from *śigru*, *mūlaka*, *palāśa*, *cukrikā*, *citraka*, *ārdra*, *nimba*, *ikṣu*,

śaikharika,⁷¹⁴ and *mocikā* (22.18).

The author

The author introduces himself as *Narahari*, *Narasimha*, *Nṛhari* and *Nṛsimha*,⁷¹⁵ son of *Īśvara*.⁷¹⁶ He was a resident of *Kaśmīr*,⁷¹⁷ of royal blood,⁷¹⁸ and took part in warlike activities.⁷¹⁹ His favourite deities were *Śiva* and *Pārvatī*.⁷²⁰ Additional, but questionable,⁷²¹ information is found in the colophons of some MSS.⁷²² This information is as follows: *Narahari* was the son of *Īśvarasūri*,⁷²³ a physician who was also called *Caṇḍeśvara*,⁷²⁴ and the disciple of *Amṛteśānanda*⁷²⁵ who belonged to the *śiṣyaparamparā* of *Somānanda*;⁷²⁶ he was a resident of *Simhapura* in *Kaśmīr*.⁷²⁷

Narahari is sometimes credited with two more medical works, the *Gūṇasārasamuccaya* and the *Vāgbhaṭamaṇḍana*.⁷²⁸ The latter is by a different *Narahari*.⁷²⁹

Date

The terminus post quem of the *Rājanighaṇṭu* can be deduced from the sources mentioned by the author. The latest of these sources being the *Madanapālānighaṇṭu*, composed in 1375, the *Rājanighaṇṭu* cannot be earlier than the fifteenth century.⁷³⁰ The terminus ante quem is provided by quotations in two works dating from the seventeenth century, *Bhānujī Dikṣita*'s commentary on the *Amarakoṣa* (first half of the seventeenth century)⁷³¹ and *Raghunātha*'s *Bhojanakutūhala*.

The evidence collected by P.V. Sharma⁷³² in order to establish that the *Rājanighaṇṭu* is posterior to the *Bhāvaprakāśanighaṇṭu* and may date from the seventeenth century is invalid in my view. His first argument, the description of the plant called *pīṭakaravīra*⁷³³ by the author of the *Rājanighaṇṭu* (*karavīrādi* 16), while the plant is absent from *Bhāvamiśra*'s work, can be discarded because this plant was already known to *Kaiyadeva*.⁷³⁴ His second argument, the presence of *kulañja(na)*⁷³⁵ in the *Rājanighaṇṭu* (*pippalyādi* 55), known as *ugragandhā sugandhā* to *Bhāvamiśra* (*haritakyādivarga* 105), does not carry much weight, since *kuliñja(na)*, a synonym of *kulañja(na)*, was already prescribed by *Śārṅgadhara* in his *Triṣaṭī* (168) and *Soḍhala* in his *Gadanigraha* (*lehādhikāra* 342).⁷³⁶ His third argument, the presence in the *Rājanighaṇṭu* of a series of drugs, such as *kālāñjanī* (śātāhvādi 186–187),⁷³⁷ *kāmavṛddhi* (śātāhvādi 196–197), *karpūrataila* (kṣīrādi 125) and *sarvakṣāra* (*pippalyādi* 257–258), whereas these are not described in the *Bhāvaprakāśanighaṇṭu*, is inconclusive, because the *Rājanighaṇṭu* contains a large number of medicinal substances which are not found in any other *nighaṇṭu*. His fourth argument, the description of *jhaṇḍū* (*parpatādi* 141),⁷³⁸ may be important as a clue to the date of the *Rājanighaṇṭu*, provided that P.V. Sharma is right in his identification and his claim that it was introduced into India at the end of the sixteenth century.⁷³⁹ The same applies to the plant called *himāvali* (*pippalyādi* 245–246), but only if it is actually the same as the *dvīpāntaravacā* of the *Bhāvaprakāśanighaṇṭu* (*haritakyādivarga* 107–108), i.e., *cobacini* or *sarsaparilla*, as suggested by P.V. Sharma.⁷⁴⁰

P. Hymavathi⁷⁴¹ developed his own views regarding the date of the author of the *Rājanighaṇṭu*, basing himself on the (erroneous) conviction that he was a disciple of *Śrīkaṇṭhapāṇḍita*, the *śuddha Śaiva* and medical author. He asserts that *Narahari*

or Narasiṃha hailed from a brāhmaṇa family adhering to the Kāśmīr school of Śaivism, which was introduced in the southern part of India after the establishment of Mohammedan rule in the North.⁷⁴² The date of Śrīkaṇṭha (A.D. 1300-1360) and the fact that the *Rājanighaṇṭu* is later than the *Madanapālanighaṇṭu* made him conclude that the former work must have been written shortly after the latter, towards the end of the fourteenth century. P. Hymavathi identifies Narahari's patron as Narasiṃha IV, who ruled in Kalinga between A.D. 1378 and 1409.

The evidence available, however, points to the fifteenth or sixteenth century as the period of composition of the *Rājanighaṇṭu*. The identity of jhaṇḍū and himāvalī, and the date of their introduction into India, may prove to be clues enabling us to narrow the limits.

Narasimhaśāstrin

Narasimhaśāstrin wrote, probably in the period A.D. 1500-1570, the *Vaidyasārasaṃgraha*.⁷⁴³ The work begins with nāḍi- and mūtraparīkṣā.⁷⁴⁴

Nayanasukha

Nayanasukha, a Jaina monk, son of Keśavadāsa,⁷⁴⁵ wrote a *Vaidyamanotsava* in Hindī verse.⁷⁴⁶ This treatise, consisting of about 320 verses, arranged in seven chapters, is said to have been influenced by Lolimbarāja's *Vaidyajīvana*.⁷⁴⁷ It is referred to as a source in Vidyāpati's *Cikitsāñjana*.

The *Vaidyamanotsava* was completed at Sīhananda or Siṃhacanda in A.D. 1592, as indicated by the author himself.⁷⁴⁸

The Paraśurāmapratāpa

The *Paraśurāmapratāpa*,⁷⁴⁹ a huge work of an encyclopaedic character on dharmaśāstra in sixteen sections (kāṇḍa), contains some matter of medical interest. The āhnikakāṇḍa gives a long extract, called pākādhya, from a work on pākāśāstra ascribed to Suśeṇa,⁷⁵⁰ some information on aphrodisiac medicines, and a detailed account of manufacturing various scents. The saṃskārakāṇḍa contains the whole of the first part of the *Śiśurakṣāratna* by Pṛthvīmalla, and the text of a treatise called *Bālakarakṣā* or *Bālarakṣikā* by Karuṇāprāṇanātha.⁷⁵¹

The authorship of the *Paraśurāmapratāpa* is ascribed to Pratāpanrpati or -rāja, one of the sons of Padmanābhi, son of Lakṣmīdhara. Pratāparāja, who was a devotee of Paraśurāma, was patronized by Nizām Shāh of Ahmadnagar, identified as Burhān Nizām Shāh (A.D. 1509-1553)⁷⁵² of the Nizām Shāhī dynasty by P.K. Gode, who places Pratāparāja between 1531 and 1550.⁷⁵³ The real author of the work under discussion was probably Kūrmasūri, the teacher of Pratāparāja. This Kūrmasūri must have been a scholar of wide learning, as is apparent from the large number of works from which he quotes. Interesting from a medical point of view are the quotations from *Haramekhālā*, Śālihotra, Śārṅga(dhara), and *Vṛddhavāgbhaṭa*.

Pratāparadradeva

Pratāparadradeva was the author of the *Kautukacintāmaṇi*, a work in 1,656 verses, arranged in three sections (dīpti), on different subjects, including magic.⁷⁵⁴

Some of the subjects are: ātmaśarīrarakṣā,⁷⁵⁵ dr̥ṣṭibandha, khaḍgastambhana,⁷⁵⁶ agnistambhana, annapākastambhana, gṛhadāhastambhana,⁷⁵⁷ jalastambhana, vayovīryādistambhana, (rāja-, strī-, pati-, gajādi)vaśīkaraṇa,⁷⁵⁸ kṛtrimavastukaraṇa⁷⁵⁹ (muktā-, padmarāga-, indranīlākaraṇa, etc., karpūrakaraṇa, etc.).⁷⁶⁰

The section on royal entertainments (vinoda) contains formulae for the preparation of various kinds of fireworks.⁷⁶¹

A *Kautukacintāmaṇi* is one of the sources of Basava's *Śivatattvaratnākara*.

The treatise dates from about 1520.⁷⁶²

Pratāparudra, the king of Orissa who was renowned as a patron of Sanskrit literature, is credited with the *Kautukacintāmaṇi*. This king of the Gajapati dynasty, who was a contemporary of Caitanya and was greatly influenced by his teaching, ruled from A.D. 1497 to 1539.⁷⁶³

Rāmakṛṣṇa Vaidyarāja

Rāmakṛṣṇa Vaidyarāja wrote a *Kanakasimhprākāśa* under the patronage of Kanaka-simha of Bagesara in Bihār, a descendant of Jaitrasimha of the Gauravaṃśa.⁷⁶⁴ The work dates from the sixteenth century.⁷⁶⁵

Sādhukīrti

Sādhukīrti, a pupil of Jinasāgara of the Kharataragaccha, was the author of the *Śeṣasaṃgrahanāmamālā*, a supplement in about 1,500 śloka to Hemacandra's *Abhidhānacintāmaṇi*. The bulk of the work is devoted to the names of trees, shrubs, etc.⁷⁶⁶

Sajjana

Sajjana wrote in 1585 the *Sūktāmtapunaruktopadaṃśadaśana*, a very brief treatise on medicine in forty-five verses, preceded by two introductory and nine preliminary verses. The author's name and the title of the work are mentioned at the end. An alternative title is *Vaidyavidyāvilāsa*.⁷⁶⁷

Śrīśailanātha

Śrīśailanātha, son of Avadhānasarasvatī, grandson and pupil of Kāmeśanātha, great-grandson of Ekāmranātha, wrote his *Praśnottararatnamālā*⁷⁶⁸ under the patronage of Veṅkaṭādrivibhu,⁷⁶⁹ a king of the Vijayanagar empire. If this king is Veṅkaṭādrī or Veṅkaṭa I, who was the son of Acyuta Rāya, and who, after the death of his father in 1541 or 1542, ascended the throne and reigned for about six months only,⁷⁷⁰ Śrīśailanātha belongs to the sixteenth century.⁷⁷¹

The *Praśnottararatnamālā* is quoted in Caturbhūja's commentary on the *Rasahrdayatantra*.

Subhacandra

Subhacandra was the author of the *Jivakacarita*⁷⁷² or *-tantra*, dealing with the life of Jivaka, the famous physician of Buddhist literature. The work is assigned to the sixteenth century.⁷⁷³ It is referred to in another work of the same author, the *Bṛhatpāṇḍavapurāṇa*.⁷⁷⁴

Ṭoḍaramalla

Ṭoḍaramalla, Akbar's finance minister, engaged a number of scholars of Benares to compile an encyclopaedic work. This huge encyclopaedia, the *Ṭoḍarānanda*, consists of twenty-two sections (*saukhyā*),⁷⁷⁵ the last of which, the *Āyurvedasaukhyā*,⁷⁷⁶ is concerned with medicine.

Contents

The *Āyurvedasaukhyā* is arranged in ninety-seven chapters (*harṣa*).⁷⁷⁷ Their order has been re-arranged in the edition.

Volume I contains the larger part of chapter eight⁷⁷⁸ (chapters 1–29 of the edition), chapter twelve (chapter 30 of the edition), and chapters eighty-four to ninety-one (chapters 31–38 of the edition), all dealing with materia medica.

The subjects of volume I are: (1) the basic concepts of pharmacology (*rasa*, *guṇa*, *vīrya*, *vipāka*, *prabhāva*); (2) the medicinal properties of drugs (metals, minerals and gems included); (3) salts and caustics; (4) the sugarcane and its products; (5) honey; (6–9) milk and other dairy produce; (10) oils; (11) alcoholic drinks; (12) vinegar (*śukta*); (13) urine; (14) water; (15–16) grain and pulse; (17) meat; (18) fish; (19) fruits; (20) vegetables; (21) the best (*śreṣṭha*) among various articles of diet; (22) the properties and actions of the six tastes; (23–27) prepared foods; (28) *anupāna*; (29) substitutes for drugs (*anukalya*); (30) groups of drugs (*gaṇoddeśa*); (31–35) synonyms of drugs (*abhyādi*), spices (*supādika*), fragrant substances (*karpūrādi*), metals, minerals, gems, etc. (*suvarṇādi*), and trees (*vanaspativarga*); (36) names and properties of fruits (*phalavarga*); (37) names of vegetables and their synonyms (*śākavarga*); (38) names and properties of prepared foods.

These chapters on materia medica have rather carelessly been compiled⁷⁷⁹ from various sources without making them into a coherent whole. This explains that (a) subjects have been dealt with twice,⁷⁸⁰ (b) two separate chapters are devoted to various fruits⁷⁸¹ and prepared foods,⁷⁸² (c) properties of drugs are described while the synonyms of these drugs have been omitted,⁷⁸³ (d) synonyms are given of substances which are absent from the chapters which are concerned with the medicinal properties of drugs,⁷⁸⁴ and (e) the order of the drugs dealt with in chapter two does not agree at all with that of the synonyms in chapters thirty-one to thirty-four.

In contrast with other parts of the *Āyurvedasaukhyā*, the chapters on materia

medica contain few references to the sources. Those mentioned in the text are:⁷⁸⁵ *Ārogyacintāmaṇi* (30.44–48),⁷⁸⁶ Caraka, (*Tisāṭa*'s) *Cikitsākalikā* (30.96), Dhūrjati (30.107–108), *Dravyaguṇaratnamālā* (1.5),⁷⁸⁷ Jayyāta (6.36), Kṛṣṇātreya (30.151–152), Parāśara (2.44), Suśruta, Vāgbhaṭa, and *Vṛddhasuśruta* (14.58–60). A major source, the *Mādhavadravayaguṇa*,⁷⁸⁸ was, however, left unmentioned. The many verses, common to the chapters on materia medica of the *Āyurvedasaukhyā* and the *Bhāvaṇaprakāśanighaṇṭu*,⁷⁸⁹ can be seen as a result of borrowing,⁷⁹⁰ indebtedness to a common source, or the collaboration of Bhāvaṇiśra in the compilation of the *Āyurvedasaukhyā*.⁷⁹¹ The verses which are also found in the *Āyurvedaprakāśa*⁷⁹² derive from a common source or have been borrowed from the *Āyurvedasaukhyā* since the latter is anterior to the former.

A major source that went unnoticed so far is the *Madanapālanighaṇṭu*, put to use extensively in chapters 31–38, while verses common to *Āyurvedasaukhyā* and *Soḍhalanighaṇṭu* are found in chapter twenty.⁷⁹³ Almost the whole of chapter twenty-nine on substitutes is strikingly similar to the verses on this subject in Vāgasena's *Cikitsāsārasaṃgraha* (*dravyaguṇādhikāra* 65–88). Finally, Cakrapāṇi-datta's *Dravyaguṇasaṃgraha* may also have been utilized by the compilers of the *Āyurvedasaukhyā*.⁷⁹⁴

Volume II contains the first six chapters of the *Āyurvedasaukhyā*, which are concerned with the basic principles of āyurveda and allied topics. After some introductory verses (1–8), chapter one deals with the aims of āyurveda and its definition (9–13ab), the eight branches of āyurveda (13cd–40), the four limbs of treatment (41–45), the characteristics of a physician (48–92), the various kinds of diseases (93–126), the modes of examination of a patient (127–149), and the classification of diseases (150–168). Chapter two is about the *doṣas* (2–132), decrease of the tissues (*dhātu*), impurities (*mala*), etc. (133–163), remedial measures in general (164–174), the types of country and soil (175–202), and the constitutions, together with the character types (203–229). Chapter three is concerned with the five elements (*mahābhūta*) and the *mahābhautika* composition of drugs (2–20ab), various types of drug action (20cd–65), the tastes (66–80), *vīrya* (81–87), *guṇa* (88–93), *vipāka* (94–109), *prabhāva* (110–115), the divisions of time and the regimen for the various seasons (116–235), pollution of land, water and air (236–250), epidemic diseases (251–261), the regimen for day and night (262–355), and the examination of the age, strength, and *sātmya* of a patient (356–411). Chapter four treats of the fires in the human body, the digestive processes (10–40), the tissues (*dhātu*) and their metabolism (41–62), the physiology of the generative organs, conception, embryology, pregnancy, and allied subjects (63–221), anatomy (222–295), the marmans (296–346), death, health, and general lines of treatment (347–361). Chapter five is devoted to prognostics (*omina*, *aṛiṣṭas*, dreams, etc.). The subjects of chapter six are the examination of the pulse (2–25), urine (26–69), faeces (70–86), eyes (87–94), tongue (95–101), teeth (102–108), and the prediction of the date of death (120–160).

Sources and authorities referred to are: Agniveśa,⁷⁹⁵ Ātreya,⁷⁹⁶ Atri,⁷⁹⁷ Aupadhenava,⁷⁹⁸ Bhāluḥ,⁷⁹⁹ Bhāradvāja,⁸⁰⁰ Bhoja,⁸⁰¹ Cakṣuṣya,⁸⁰² Candrāta,⁸⁰³ Caraka,⁸⁰⁴ Carpaṭi,⁸⁰⁵ *Cikitsākalikā*,⁸⁰⁶ *Cikitsāsārasaṃgraha*,⁸⁰⁷ Dālhaṇa,⁸⁰⁸ Garga,⁸⁰⁹ Gopura,⁸¹⁰ Hariścandra,⁸¹¹ Hārīta,⁸¹² Jejjāta,⁸¹³ Kharanāda,⁸¹⁴ Kṛṣṇātreya,⁸¹⁵ Kṣemendra,⁸¹⁶

Mārkaṇḍeyapurāna, *Nāgārjuna*,⁸¹⁴ *Narapaticaryā*,⁸¹⁵ *Padmapurāṇa*, *Pārāśara*,⁸¹⁶ *Prayogapārijāta*,⁸¹⁷ *Rasārṇava*,⁸¹⁸ *Ratnākara*, *Rudrāgama*,⁸¹⁹ *Rudrakautuka*,⁸²⁰ *Rudratāntra*,⁸²¹ *Sarvāṅgasundara*,⁸²² *Śaunaka*,⁸²³ *Śivāgama*,⁸²⁴ *Śrīnivāsasamhitā*,⁸²⁵ *Suśruta*,⁸²⁶ *Tisāṭa*,⁸²⁷ *Vāgbhaṭa*,⁸²⁸ *Vaidyaka*,⁸²⁹ *Vaikhāṇasa*,⁸³⁰ *Vaiṣṇavāgama*,⁸³¹ *Vaiśvānara*,⁸³² *Vasiṣṭha*, *Vāsudeva*,⁸³³ *Videha*,⁸³⁴ *Vīrabhadra*,⁸³⁵ *Vivekamārtanḍa*,⁸³⁶ *Vṛddhabhoja*, *Vṛddhahārīta*, *Vṛddhātreyā*, *Vṛddhavāgbhaṭa*, *Yogapradīpa*,⁸³⁷ *Yogarātnāvalī*,⁸³⁸ and *Yogaśārīra*.⁸³⁹

Sources left unmentioned may be Bhoja's *Cārucaryā*,⁸⁴⁰ Kaṇāda's *Nāḍivijñāna*,⁸⁴¹ and Rāvaṇa's *Nāḍiparikṣā*.⁸⁴² Some verses from the *Yogaśataka* are not indicated as such (2.97) or even said to derive from the *Cikitsākalikā* (2.76 and 78–81).

Volume III contains four chapters (chapters thirteen to sixteen of the *Āyurvedasaukhyā*). Chapter one deals with the five ways of diagnosing a disease (*nidāna*, *pūrvartūpa*, *rūpa*, *upaśaya* and *samprāpti*) and quotes the verses relevant to this subject from the *Aṣṭāṅgahṛdayasamhitā*, adding comments in prose from an unknown source.⁸⁴³ It also gives examples of the various types of therapeutic diagnosis (*upaśaya*)⁸⁴⁴ and some verses on diseases acting as a causative factor for another disease.⁸⁴⁵ Chapter two is about the six ways of treatment (*laṅghana*, *bṛmhaṇa*, *stambhana*, *sneha*, *sveda* and *rūkṣaṇa*) and chapter three about fever and the general lines of its therapy. Chapter four is concerned with the symptoms and therapy of particular types of fever: *navajvara* (1–6), *āma*- and *nirāmajvara* (7–25), *antarvega*- and *bahirvegajvara* (26–27), the dosic types (35–256), fourteen *samnipāta* fevers (257–691), *āgantū* fevers (692–738), irregular fevers (*viṣamajvara*; 739–1069), relapsing fevers (*punarāvartakajvara*; 1070–1079), fevers located in the *dhātus* (1080–1095), chronic fevers (*jīrnajvara*; 1103–1289); recipes for inducing sleep and rules pertaining to sleep (1290–1327) are followed by verses on the fever caused by alcoholic drinks (1349–1356), a fever occurring in regions situated at the foot of mountains (*aupatyakajvara*; 1357–1359), fevers caused by polluted water (1360–1371), and a series of fevers called *raudrajvara*, *māhendrajvara*, *jvareśvara*, *kālajvara* and *gambhīrajvara* (1373–1381); the chapter ends with verses on some miscellaneous subjects connected with fever.

Volume IV contains nine chapters (chapters seventeen to twenty-five of the *Āyurvedasaukhyā*), dealing with the symptoms and treatment of (1) *atisāra* (diarrhoea), (2) *saṃgrahaṇī* (sprue), (3) *aśas* (haemorrhoids), (4) *agnimāndya* (sluggishness of the digestive fire), (5) *kṛmi* (worms), (6) *pāṇḍuroga* (morbid pallor and jaundice), (7) *raktapitta* (haemorrhagic disorders), (8) *rājayakṣman* (consumptive disorders), and (9) *kāsa* (cough).

Volume V has fourteen chapters (chapters twenty-six to thirty-nine of the *Āyurvedasaukhyā*), dealing with the symptoms and treatment of (1) *hikkā* (hiccup) and *śvāsa* (respiratory disorders), (2) *svarabheda* (disorders of the voice), (3) *arocaka* (anorexia), (4) *chardi* (vomiting), (5) *trṣṇā* (thirst), (6) *mūrchā* (fainting), *bhrama* (giddiness), *nidrā* (sleep), *tandrā* (drowsiness) and *saṃnyāsa* (loss of consciousness), (7) *pānātyaya*, *paramada*, *pānājīrṇa* and *pānavibhrama* (alcoholic disorders), (8) *dāha* (burning syndrome), (9) *unmāda* (insanity) and *bhūtonmāda* (possession by evil spirits), (10) *apasmāra* (epilepsy), (11) *vātavyādhi* (wind diseases), (12) *vātaśoṇita* (gout), (13) *ūrustambha* (stiffness of the thighs), and (14) *āmavāta* (rheumatic disorders).

Volume VI has eighteen chapters (chapters thirty-six and thirty-eight to fifty-three of the *Āyurvedasaukhyā*),⁸⁴⁶ dealing with the symptoms and treatment of (1) *śūla* (piercing pain), (2) *pariṇāmaśūla* (piercing pain appearing during digestion) and *annadravaśūla* (piercing pain appearing without any connection with the digestive process), (3) *udāvarta* (a group of disorders caused by the suppression of natural urges) and *ānāha* (obstructive abdominal swelling), (4) *gulma* (visceral swelling), (5) *hṛdroga* (heart diseases), (6) *urograha* (a disease characterized by swelling of liver and spleen and pain in the lateral parts of the abdomen) and *mūtrakṛcchra* (dysuria), (7) *mūtrāghāta* (urinary obstruction), (8) *aśmarī* (stones in the urinary tract), (9) *prameha* (urinary disorders) and *pramehapiḍakā* (pustules as sequelae of prameha), (10) *medoroga* (obesity), (11) *kṛṣaroga* (emaciation), (12) *udara* (abdominal swelling), (13) *śoṭha* (localized swelling), (14) *vṛddhi* (scrotal swelling), (15) *galagandha* (goitre), *gaṇḍamālā* (lymphadenopathy), *apacī* (chronically suppurating lymph nodes), *granthi* (small tumour), *arbuda* (large tumour), (16) *ślīpāda* (filariasis), (17) *vidradhi* (abscesses), (18) *vraṇa* (ulcers and wounds; burns, fractures and dislocations are included).

Volume VII consists of seventeen chapters (chapters fifty-four to seventy of the *Āyurvedasaukhyā*), dealing with the symptoms and treatment of (1) *nāḍivraṇa* (sinuses), (2) *bhagandara* (anal fistulas), (3) *upadamśa* (venereal diseases in the male), (4) *śūkadōṣa* (affections of the male member), (5) *kuṣṭha* (a number of skin diseases), (6) *śītapitta*, *udarda*, *koṭha* (forms of urticaria), (7) *amlapitta* (disorders of the stomach), (8) *visarpa* (erysipelas), (9) *visphoṭa* (vesicular eruptions), (10) *snāyuka* (dracontiasis), (11) *masūrīkā* (smallpox and some other diseases), (12) *ksudraroga*, (13) *mukharoga* (diseases of mouth and throat), (14) *karṇaroga* (diseases of the ears), (15) *nāsāroga* (diseases of the nose), (16) *netraroga* (eye diseases), (17) *śīroroga* (diseases of the head).

Volume VIII consists of sixteen chapters (chapters seventy-one to eighty-three and part of chapter eight of the *Āyurvedasaukhyā*),⁸⁴⁷ dealing with (1) *aśṛgdara* (menorrhagia), *somaroga* and *mūtrātīsāra*, (2) *yonivyāpad* (diseases of the female genital tract) and *yonikanda* (prolapse of the uterus), (3) *mūḍhagarbha* (malpositions), (4) *sūtīkāroga* (puerperal diseases), (5) *stanaroga* (breast diseases), (6) *stanyaduṣṭi* (polluted breast-milk), (7) *bālaroga* (children's diseases), (8) *viṣa* (disorders due to poisons), (9) *rasāyana*, (10) *vājīkaraṇa*, (11) *sneha* (oleation), (12) *sveda*, *nasya*, *dhūmapāna*, *gaṇḍūṣa*, *kavala*, *pratisāraṇa*, (13) *vamana* and *virecana* (emetics and purgatives), (14) *basti* (enemas), (15) *uttarabasti* (urethral and vaginal douches), (16) *śoṇitasrāva* (bloodletting).

Volume IX consists of four chapters (chapters seven, nine, ten and eleven of the *Āyurvedasaukhyā*), dealing with (1) *parimāṇa* (weights and measures) and *paribhāṣā* (technical terms), (2) *rasādiśodhanamāraṇa* (the purification and killing of mercury, etc.), (3) *lohapaloḥaśodhanamāraṇa* *guṇa* *guṇasamprāptāda* *viśeṣadhātumāraṇa* *malaharaṇa* *asphuṭitadhātumṛdukarāṇa* (the purification and killing of the lohas and upaloḥas, etc.), (4) *rasoparasamahārasamaṇiratnaśodhanamāraṇasattvapātanāsattvamāraṇadrutikaraṇa* *guṇa* *guṇaviśalakṣaṇa* *adivya* *auśadhādilakṣaṇa* *vahnīlakṣaṇa* *tailapātana* *akathana* (the purification and killing of the rasas, uparasas, mahārasas, maṇis and ratnas, the extraction and killing of essences, etc.).

Chapter one is subdivided into a number of sections: *parimāṇa* (1.2–95), *auśadhaparibhāṣā* (1.96–116), and *kalpanāparibhāṣā* (1.117–571). Many subjects are dealt with in all three sections, but the third one is particularly rich.

The section on *kalpanāparibhāṣā* discusses: the types of pharmaceutical preparations: *niryāsa* (= *svarasa*), *kalka*, *niryūha* (= *kvātha*), *śīta*(*kaṣāya*), *phāṇṭa*, *rasakriyā* (inspissated extract), *saṃdhāna* (fermented fluids), *guṭikā*, *cūrṇa*, *sneha*, and *kalpa* (1.117); *svarasa* (1.118–119); *kvātha* (decoction) (1.120–121); a substitute for *svarasa* (1.122); the preparation of *svarasa* (1.123–126); *kalka* (1.127–128); *śīta*(*kaṣāya*) or *hima* (1.129–132); *phāṇṭa* (1.133–136); *mantha* (1.137); *pramathā* (1.138); doses (1.140–143); the quantities of water to be used in preparing a decoction (*kvātha*) (1.144–150); five types of pharmaceutical preparation: *cūrṇa*, *kaṣāya*, *śīśira* and *śṛta phāṇṭa*, *kalka*, *svarasa* (1.151); the preparation of a decoction (1.152); the seven types of decoction: *pācana*, *dīpana*, *śodhana*, *śamana*, *tarpaṇa*, *kledana*, and *śoṣaṇa* (1.153); the actions of these types (1.154–155); emetics may be used to counteract the adverse effects of a *kledin* or *viśoṣin* decoction (1.156); rules for the preparation of the seven types (1.157–158); indications (1.159–161); copper vessels are unsuitable to the preparation of a decoction (1.162–163); decoctions should never be boiled again (1.164–165); fresh and old drugs should never be mixed (1.166); signs indicating that a decoction is well prepared and useful (1.167); complaints arising after taking a decoction should be treated with an emetic (1.168); (*pra*)*kṣēpas*, also called *āvāpas*; rules concerning their employment (1.169–180); *pratīvāpa*, *niṣeka* and *abhiṣeka*, i.e., substances to be added when melting metals, etc. (1.181–183); doses; ratios of ingredients in various types of preparation (1.184–198); definitions of a *niryūha* and a *maṇḍa* (1.199); the preparation of *anna*, a *peyā*, *vilepī*, *yavāgū*, *maṇḍa*, *yūṣa* (1.200–202); rules for the preparation of *yūṣa* and *rasa* (1.203–206); the preparation of *māṃsarasa* (broth) for use in a *yavāgū* (1.207); the preparation of *kṛta*- and *akṛtayūṣa* (1.208–211); *cūrṇas* (1.212–215); *guṭikās* (1.216–219); the preparation of a *rasakriyā*; its dose (1.220); the preparation of an (*ava*)*leha* (1.221–222); signs indicating proper *guḍapāka* (i.e., the preparation of a *leha* containing *guḍa*) (1.223–225); the sign indicating that a *rasakriyā*, *leha* or *guḍa* has been properly prepared (1.226); the process of *puṭapāka* (1.227–230); the process of *bhāvanā* (1.231–232); the five defects that may occur in a medicine (1.233).

The chapter proceeds with discussing: *śilājatu* (1.234–252); *guggulu* (1.253); *taṇḍulodaka* (1.254); *muṣṭiyoga* (1.255); *phalavarti* (1.256–258); *kṣīrapāka* (1.259); *vajrakāñjika* (1.260); *pralepa* and *pradeha* (1.261–273); *upanāha* (1.274–275); *śīrolepa* (1.276); the preparation of *errhines* and their doses (1.277–280); mouth washes (*kavala*) and gargles (*gaṇḍūṣa*) (1.281–283); *pratisāraṇa* (1.284–285); caustics (*kṣāra*) (1.286–292); *āsavas* (1.293–298); *ariṣṭas* (1.299–300);⁸⁴⁸ enhancement of the efficacy of *āsavas* and *ariṣṭas* (1.301); the preparation of a *bhakta* (1.302); rules concerning *āsavas* and *ariṣṭas* (1.303–306); doses of *āsava* and *ariṣṭa* (1.307–308); alcoholic preparations (1.309–324); the preparation of various kinds of *cukra*, also called *śukta* (1.325–327); *kāñjika* (1.328); *tuṣāmbu* (1.329); *sauvīra* (1.330–331); the duration of the process of fermentation, dependent on the season (1.332); *uṣṇodaka* (1.333); the periods of time for the application of an *añjana* (1.334); the three types of *añjana* and the sizes of the *varti* (1.335); a *rasakriyā* used as an *añjana*; its dose

(1.336); types of *añjana* and their preparation (1.337–339); the rod (*śālākā*) for the application of an *añjana*; the materials that may be used (1.340–341); the technique of application (1.342–343); a rule for particular inorganic substances used in an *añjana* (1.344); the storage of *añjanas* (1.345); measures for the treatment of eye diseases: *seka* (sprinkling a fluid), *āścyotana* (eyedrops), *piṇḍī* (the application of a paste and tying a bandage over it), *viḍāla* (the external application of a paste), *tarpaṇa* (the application of drugs thought to be nourishing), *puṭapāka*, and *añjana* (1.346); the technique of application, indications, doses, etc., with respect to *seka* (1.347–348), *āścyotana* (1.349–351), *piṇḍī* (1.352), *viḍāla* (1.353), *netrabasti* (= *tarpaṇa*) (1.354–365); the four types of *mūrdhataila* (application of oil on the head): *abhyaṅga* (massage with oil), *pariṣeka* (sprinkling), *picu* (application of a cotton swab soaked in oil), and *śīrobasti* (application of a cap filled with oil) (1.366);⁸⁴⁹ the duration of these treatments (1.367); *picu* (1.368); *śīrobasti* (1.369–373);⁸⁵⁰ the definition of a *mātrā* (unit of time for measuring the duration of *basti*, etc.) (1.374); the definition of the bath called *avagāha* or *magna* (1.375); the number of *mātrās* required for diffusion of an oil into various constituents of the body (1.376–378); *pādābhyāṅga* (massage of the soles of the feet with oil) (1.379–380); *karṇapūraṇa* (filling the ears with oil) (1.381); *abhyāṅga* of nails and navel (1.382); *abhyāṅga* in general (body massage with a fatty substance) (1.383–387); the technique of *karṇapūraṇa* and the periods of time suitable to it (1.388–390); the preparation of *lākṣārasa* (1.391–392); rules for the preparation of medicated ghees, oils and linctuses (1.393–410);⁸⁵¹ rules for the preparation of a medicated oil containing *guggulu* (1.411); rules for the preparation of a medicated oil containing milk (*kṣīrapāka*) (1.412) and particular other fluids (1.413–414); various other rules pertaining to the preparation of medicated oils (1.415–429); the signs indicating proper preparation (1.430); two types of preparing a medicated oil or ghee: *mandacikkaṇa* and *kharacikkaṇa* (1.431); three of these types: *mṛdu*, *madhya* and *khara*; their characteristics (1.432) and indications (1.433); *madhyamapāka* is the most useful type (1.434); the signs of proper preparation according to two authorities (1.435–436); more specifications regarding the preparation of medicated oils and ghees (1.437–444).

The next section of chapter one is concerned with: the period of time for beginning the processing of mercury (1.445); the quantity of mercury to be taken (1.446); the quantities of a series of other inorganic substances (1.447–450); the mentioned rules ought to be observed (1.451); a *sattva* can be extracted from mica and other substances when properly processed (1.452); the production of a *kajjali* (1.453);⁸⁵² the production of the substance called *umāyoni* (1.454); the characteristics of purified copper (1.455); definitions of *utthāpana* and *kṣālana* (1.456), *abhiṣeka* (1.457); the production of *dhautā* (purified excrements of earthworms) (1.458); properties of the *bhasman* of mercury when prepared with vegetable substances (1.459); the doses of the *bhasman* of mercury for human beings, horses and elephants (1.460); the doses of this *bhasman* dependent on the method of its preparation, the indications for these varieties, and particularities regarding its administration (1.461–467); the addition of poisonous substances to the *bhasman* of mercury, dependent on the country of residence (1.468–471); the gradual increase of the doses; doses in different conditions (1.472–475); indications for the use

of a particular type of poison (1.476–477); the characteristics of brāhmaṇa, kṣatriya, vaiśya and śūdra poisons (1.478); general restrictions and indications for the use of poisons (1.479–480), followed by contra-indications (1.481).

The last section deals with: substitutes for medicinal substances that are difficult to procure (1.482–493); fruits to be used in a dried condition (1.494–495); rules regarding the physician's share of the drugs to be employed in a treatment; two types of share are described, called dhanvantaribhāga or aśvinikumārabhāga and rudrabhāga or rudrāṃśa (1.496–501);⁸⁵³ a schedule for dosages in children (1.502–504); the preparation of a paste to be used in the pātana of mercury (1.505–506); jāraṇa of mercury (1.507–524); rules for the use of the bhasman of gold (1.525–529); the preparation of lohas, their doses, the course of treatment, their therapeutic effects, etc. (1.530–556); the preparation of bīja (1.557–561); two definitions of an āroṭa (1.562–563); the five substances collectively called pañcamṛttikā (1.564); the description of the khalvayantra (mortar) and the peśya (pestle) (1.565–567);⁸⁵⁴ the use of the khalva (1.568);⁸⁵⁵ the round (var-tula) khalva (1.569);⁸⁵⁶ the taptakhalva, made of iron (1.570).

The chapter ends with the instruction to teach the paribhāṣās to a worthy student, one's own son, or brāhmaṇas only (1.571).

The first part of chapter two is about: rasavidyā as a science to be kept as secret as a mother's genitals (2.1); a prayer to the lord of mercury, Sūtarāja (2.2–3); the synonyms of mercury, which are the same as those of Śiva (1.4); the seven kañcukas: mṛmāya-, pāṣāṇa-, jalajakañcuka, two kañcukas due to the presence of lead (nāga) and two due to tin (vaṅga) (2.5); their characteristic effects on mercury (2.6); the five doṣas: mala-, vahni-, bhū-, unmatta-, and śailadoṣa (2.7); the adverse effects of pṛthivikañcuka (= bhūdoṣa), pāṣāṇadoṣa, vāridoṣa (= jalajakañcuka), kapālikā,⁸⁵⁷ śyāmā,⁸⁵⁸ kālī,⁸⁵⁹ and kāpālī⁸⁶⁰ (2.8–11); the adverse effects of mala-, vahni-, viṣa-, bhū-, darpa-, and unmattadoṣa (2.12); the kañcukas and doṣas should be removed for the purpose of making a bhasman; otherwise, one would incur the sin of brāhmaṇa murder (brahmahatyā) (2.13); characteristics and adverse effects of vaṅga-, āra-, nāga-, and rasakampadoṣa (2.14–19); removal of the doṣas (2.20–26); svedana of mercury (2.27–41); mardana (2.42–43); murchana (2.44–49); uthāpana (2.50); pātana (2.51–53); the production of a naṣṭapiṣṭa (2.54); the use of the taptakhalva (2.55); removal of lead and tin by means of pātana (2.56); the preparation of a piṣṭi (2.57); adhaḥpātana (2.58–61); ūrdhvapātana (2.62–65); tiryakpātana (2.66–68); two descriptions of the kacchapayantra (2.69–76); the tulāyantra (2.77–79); bodhana or rodhana (2.80–83); niyamana (2.84–86); dīpana (2.87–90); a summary of the functions of the first eight saṃskāras, described in the foregoing (2.91–99); sulphur (gandha) is the rajas, mica (abhṛaka) the śukra of Pārvaṭī; both can embrace (combine with) mercury, which is the śukra of Śiva; this combination makes mercury suitable to the killing process without suffering injury (2.100–101); the jāraṇa of mercury with sulphur (2.102); mica is the tejas of Gauṛī; its properties and actions; the combination of mercury with mica makes the former capable of inducing transmutation (vedha) (2.103–104); the gauṛīyantra and its use in the jāraṇā of mercury with sulphur (2.105–112); not any amount of mercury or sulphur may be lost in the process (2.113–114); the vajramūṣā and its use (2.115–118); the paste (lepa) used for sealing the joints of crucibles (2.119); two ways of making a vajramūṣā (2.120–122);

glass bottles (kācakūṭī) and iron vessels (lohakūṭī), their lengths, and other details (2.123); another recipe for the preparation of a paste for sealing the joints of crucibles (2.124–125); the pakvamūṣā and its function (2.126); the mallamūṣā (2.127–128); a mūṣā for the purification of silver (2.129); the making of a nigaḍayantra; its function (2.130–132); another recipe for making this yantra; the process called nigaḍabandha, to be carried out by means of it (2.133–136); useful types of clay (mṛd) (2.137); a recipe for preparing a paste to be used in sealing joints of crucibles and for wrapping around glass bottles (2.138–140); jāraṇā will be described later (2.141); the description of a process imparting a red colour to mercury, making it heatresistant, enabling it to digest other substances, etc. (2.142–152); the preparation of a piṣṭi, to be used in the jāraṇā with sulphur (2.153–154); the process called jāraṇa (2.155–158); stimulation of the digestive power (jaraṇa) of mercury (2.159); mercury that can digest metals is called āroṭa; the product of transmutation can be made stable by adding a bīja (2.160); the three types of jāraṇā called nirmukha, sanmukha and vāsanāmukha; three other varieties are called bāla-, yauvana- and vṛddhajāraṇā; the effects of the last three varieties; viḍa should be added during jāraṇa (2.161–164); the preparation of mercury from cinnabar (hiṅgula); this mercury is free from the kañcukas and may be used in recipes (2.165);⁸⁶¹ the three types of hiṅgula (2.166);⁸⁶² their properties and uses (2.167–168); mercury extracted from cinnabar should also be purified (2.169); the properties and uses of haṃsapāda hiṅgula (2.170); the purification of hiṅgula (2.171); the properties and actions of hiṅgula (2.172).

The second part of chapter two deals with: the preparation of the bhasman of mercury, its use and its effects (2.173–191);⁸⁶³ other methods of preparation (2.192–195);⁸⁶⁴ methods of preparing rasasindūra (2.196–200); methods of preparing rasakarpūra; its properties and effects (2.201–208); the preparation of harīṇakhuri-baddharasa (2.209–215); another method of preparing rasasindūra; its use and effects (2.216–220); methods to prepare the bhasman of mercury (2.221–222); the preparation of a paṇḍura bhasman that is useful in killing other metals (2.223–227); the preparation of a bhasman of mercury by means of several yantras (puṭayantra, bhairava- or somānālayantra, vālukāyantra); the recipe for a paste, called sarvatomukhamudrā, for sealing the joints; the wonderful and curative effects of a mixture of the bhasman and another powder; rules regarding the diet, etc., of persons taking this drug (2.228–256); another way of preparing a bhasman of mercury (2.257–259); the preparation of a bhasman with a golden hue (2.260) and the colour of saffron (2.261); the preparation of vaikrāntabaddhasūta, its use and its effects (2.262–272); the preparation of another bhasman with curative properties (2.273–276); a way of preparing rasasindūra (2.277–279); the process of killing mercury requires the addition of gold, etc.; mercury is considered to be murchita when it looks like a collyrium (2.280–281); the preparation of a nirvīrya- and savīryabhasman; the latter is therapeutically more potent (2.282–283); the preparation of rasaparpati, particularly useful in treating children (2.284–285); the preparation of a patient for treatment with a bhasman of mercury; a bhasman of copper should be given first; the dose of bhasman of mercury should be gradually increased according to a particular schedule (2.286–287); rules for those using a bhasman of mercury; a group of eight vegetables, called kakāraṣṭaka,

may not be eaten; other dietary articles to be avoided; types of women to be avoided and women to be chosen as attendants; the type of woman called *kākinī*; intercourse with her frees from all diseases (2.288–300); intake of the bhasman of mercury leads to a heightened libido during the first three weeks; intercourse, however, should be avoided during this period, because it would result in *śukrameha*; after three weeks, pretty women may massage the body of the person using the bhasman, which will help in making the mercury permeate all the tissues; additional rules for the regimen during treatment; sexual intercourse would result in death (2.301–305); the symptoms occurring when the bhasman is not properly digested, and the treatment of this disorder, called *rasājirṇa* (2.306–313); treatment of the effects caused by the intake of mercury, tainted by the association with lead (2.314) or tin (2.315); signs indicating the proper digestion of the bhasman (2.316); a description of *hiṅgula* (2.317–318); the effects of purified and killed mercury (2.319–321).

The third part of chapter two is about: the mythical origin of sulphur (*gandhaka*) (2.322); the four types of sulphur and their uses (2.323);⁸⁶⁵ various methods for the purification of sulphur (2.324–334); the preparation of *gandhakataila*, to be used in recipes (2.335–337); the adverse effects of impure sulphur (2.338); two more ways of preparing *gandhakataila*, to be used in processing mercury and in recipes (2.339–342); the mythical origin of the metals, sulphur, and mica (2.343–344); sulphur and mica are similar to mercury in preventing (untimely) death (2.345); those desiring a healthy condition should offer their prayers to the sun, those striving after replenishment of their bodily constituents should pray to the moon, those wanting to be freed from disease should pray to the highest *Devadeveśa* (i.e., *Śiva*) (2.346); the mythical origin of mica (*abhraka*) (2.347); the four varieties of mica and their uses (2.348–349);⁸⁶⁶ the effect of fire on the *pināka* type of mica; intake of its bhasman leads to *mahākuṣṭha* (2.350); the effect of fire on the *dardura* type; intake of this type may lead to *bhagandara* (2.351); the effect of fire on the *nāga* type; its intake causes *udara*, *prameha* and impotency (2.352); the *vajra* type remains stable under the influence of fire; it cures diseases and prevents decrepitude and death (2.353); a mythical story about the origin of the *vajra* type, explaining its name (2.354–356); the four types of mica: *brāhmaṇa*, *kṣatriya*, *vaiśya* and *śūdra*, white, red, yellow and black in colour respectively (2.357); the *sattva* of mica is responsible for its actions; mica, collected in the northern mountains, contains more *sattva* than that coming from the south; the black variety is the best for therapeutic purposes (2.358–359); the removal of the defect called *giridoṣa* (2.360); further purificatory procedures (2.361–365); the preparation of *dhānyābhra*, used in killing mica (2.366); the adverse effects of impure mica and of mica that is not killed (2.367); various methods of preparing the bhasman from *dhānyābhra* (2.368–379); therapeutic effects of the bhasman (2.380); preparation of the bhasman in the *andhamūṣā* by means of one *gajapūṭa* (2.381); two other methods of preparing the bhasman (2.382–384); the *amṛtīkaraṇa* of mica (2.385–386); the effects of the bhasman (2.387–389); the dose and its gradual increase (2.390); two methods of extracting the *sattva* (2.391–394); the formula of *kṣayāntakarasa* and its curative actions (2.395–396); the therapeutic actions of the bhasman, dependent on the number of *puṭas* during its preparation (2.397); the bhasman of mica is called *bija* after having been subjected to a hundred *puṭas*; this *bija*

leads to the formation of *ojas* and to beauty, and sustains the body (2.398); gold, silver, copper, iron of the *tikṣṇa* type, tin (*kuṭīla*), and lead (*pannaga*) are the six natural metals used in processing mercury (2.399). The last verse summarizes the contents of the chapter (2.400).

Chapter three deals with: the eight metals (*loha*), used for *dehasiddhi*: gold, silver, copper, lead, tin, *kānta*(*loha*), *tikṣṇa*(*loha*), and *muṇḍa*(*loha*) (3.1); the three artificial (*kṛtrima*) metals: *ghoṣa*, *rīṭikā* and *āvarta* (3.2ab); *maṇḍūra*, the waste product (*kiṭṭa*) of *muṇḍa*, is called an *upaloha* (1.3.2cd); the excellent metal called *sāmbūka* (iron from meteorites), which is a product of lightning (*vidyut*), is called a *mahāloha*; it falls from the sky upon the earth, is rare, and may be obtained as a boon from *Vetālas*, etc. (3.3–4ab); iron from the *śālagrāma*,⁸⁶⁷ extremely rare (3.4cd); *sphāṭika* iron, extracted from *sphāṭika* found in *Kāśmīr*, is available in scanty amounts (3.4ef); the eight metals are, according to the *Nandikācāryatantra*: gold, silver, copper, lead, tin, *kānta*(*loha*), *vidyujja*(*loha*) (arising from lightning) and *sphāṭikodbhūta* (3.5);

the mythical origin of gold and its five types (3.6–8);⁸⁶⁸ the relative merits of three kinds of gold, dependent on their colours (3.9);⁸⁶⁹ the ten defects (*doṣa*) of gold; their presence makes it unsuitable to medicinal use (3.10); the adverse effects of impure gold (3.11); the purification of gold (3.12–13);⁸⁷⁰ eight methods for the preparation of the bhasman of gold (3.14–37);⁸⁷¹ the storage of the bhasman (3.38); rules for its administration (3.39); metals are reduced to a bhasman by the smell of sulphur or *mākṣika* (3.40); the properties and actions of (the bhasman of) gold (3.41–45);

the three types of silver (3.46);⁸⁷² its mythical origin (3.47); characteristics which make silver unsuitable to use (3.48); characteristics of silver suitable to use (3.49); the purification of silver (3.50–51);⁸⁷³ adverse effects of impure silver (3.52); four methods of preparing the bhasman (3.53–57); the properties and actions of the bhasman (3.58–59);

the mythical origin of copper (3.60);⁸⁷⁴ regions where good types of native copper are found (3.61); the properties and relative merits of copper from these regions (3.62–63); properties due to impurities; the defects (*doṣa*) of copper (3.64–65); methods of purification (3.66–67); the adverse effects of copper affected by the *doṣa* called *kālikā* (3.68); the removal of *kālikā* (3.69–71); the characteristics of copper free from *kālikā* (3.72); the purification of copper in the *kavacīyantra* (3.73–74); the actions of copper purified in this way (3.75–76); the preparation of the bhasman (3.77); its therapeutic actions (3.78); two other methods of preparing the bhasman; its therapeutic actions (3.79–83); a fourth method of preparing the bhasman (3.84–85); a method of making copper melt quickly (3.86); a fifth method of preparing the bhasman (3.87–88); two opinions concerning the composition of the group of substances called *pañcāmṛta*, used in the *puṭa* of the bhasman of copper (3.89–90); disorders caused by unprocessed (*apakva*) copper (3.91); only copper free from *kālikā* should be used in recipes (3.92); the therapeutic actions of copper preparations (3.93–95);⁸⁷⁵

the two types of tin⁸⁷⁶ and their relative merits (3.96);⁸⁷⁷ characteristics that make it suitable to use (3.97); the five defects of tin which make it unsuitable to use (3.98); the purification of tin; its actions in a purified and in an impure state (3.99–102); six methods of preparing the bhasman (3.103–115); diseases caused by unprocessed (*pā-*

kaḥīna) lead and tin (3.116); a seventh method of preparing the bhasman of tin (3.117); properties and actions of tin preparations (3.118–119);

the properties of suitable and unsuitable types of lead (3.120);⁸⁷⁸ its purification (3.121–122a); six methods of preparing the bhasman (3.122b–131); the actions of the bhasman (3.132–136);

pittala (= rīṭikā) (brass)⁸⁷⁹ and kāmsya (= ghoṣa) are usually not regarded as very useful in medicine (3.137); the preparation of kāmsya (bronze);⁸⁸⁰ the best variety is that produced in Saurāṣṭra (3.138); the seven good (3.139) and bad (3.140) qualities of kāmsya; kāmsya may be purified and killed like copper (3.141); an adverse effect of impure kāmsya (3.142); properties and actions of purified kāmsya (3.143–144); the two types of pittali (= pittala) and how to distinguish them (3.145–146); the characteristics of pittala of good quality (3.147); rīṭikā may be purified and killed like copper (3.148); the properties and actions of rīṭikā preparations (3.149);

the mythical origin of iron (3.150–152); the topics to be discussed⁸⁸¹ (3.153–154); the quantity of iron to be taken for processing (3.155); the preparation of a triphalā decoction for the nirvāpaṇa (immersion of a heated metal in a fluid) of iron (3.156); removal of the impurity called girimala (3.157–158); the origin of various types of iron from the body of the Daitya called Lomila, who was killed by the gods (3.159–162); iron is used as an aphrodisiac and in the treatment of vāta diseases (3.163); iron is of three main kinds:⁸⁸² muṇḍa,⁸⁸³ tīkṣṇa⁸⁸⁴ and kānta;⁸⁸⁵ muṇḍa is of three varieties: mṛdu, kuṇḍa and kaṇḍāra;⁸⁸⁶ tīkṣṇa is of six varieties: kharasāra,⁸⁸⁷ hotāla, taḍa-vaṭṭa,⁸⁸⁸ cīḍa, kāntaloḥa and gajākhya; kānta is of four varieties: romaka, bhrāmaka, cumbaka and drāvaka (3.164–166ab);⁸⁸⁹ the *Rasārṇava* distinguishes a fifth variety, called karṣaka (3.166cd);⁸⁹⁰ iron originating from a particular mine (ākara) cures the diseases of the people living in the country where that mine is located (3.167); the two types of sāra (= sattva) of iron: audra⁸⁹¹ and kalingaja; the characteristics of the bhasman of the kalingaja type (3.168–169); the two types of iron ore (3.170); the ten varieties of iron according to the *Lohapaddhati* (3.171–173); the therapeutic actions of iron (3.174); the characteristics of the types of iron called pāṇḍya, mahīṇḍaka, kāntija, kṛṣṇāyasa and kānta (3.175–179); a combination of mercury and iron sustains the body (3.180); the therapeutic actions of the varieties of kāntaloḥa called sāra, auṇḍra, kalingaja, taḍa-vaṭṭa and bhadra (3.181–185); the therapeutic actions of pāṇḍi, kāntija and kānta iron (3.186–188); the rust (kiṭṭa) of each variety of iron has the same effects as the iron from which it originates (3.189); the relative merits of kiṭṭa, muṇḍa, sāra, auṇḍra, kalinga, bhadra, vajra, pāṇḍya, and kāntija; the last type is the very best (3.190–191); the properties of kānta iron, derived from śālagrāma stones, iron derived from sphatika, and the type finding its origin in lightning; these types should be used in mercurial recipes and for rasāyana purposes; the actions of iron that has the form of a liṅga (3.192–193); the adverse effects of impure iron (3.194–195); the seven defects (doṣa) of iron (3.196); four methods of purifying iron (3.197–203); signs indicating that iron has been purified (3.204); seven methods of preparing the bhasman of iron (3.205–225); gaṇḍanikā, the chief drug used in the killing of iron; its synonyms (3.226–227); eight drugs employed in the killing of iron: amarī, cāṅgerī, vikaṅkata, raktamāṛiṣa, tvacaka, manahśilā, hiṅgula, and svarṇamākṣika; the curative actions of these drugs (3.

228–230); three more methods of preparing a bhasman by killing iron (3.231–238); four methods of ayaskṛti, which produces a bhasman that is vāritara (floating on water) and niruttha (iron cannot be retrieved from it) (3.239–247); the preparation of a red bhasman, also vāritara and niruttha, by means of the juice of the plant called śālicīñcī, also known as chilahiṇḍikā, garuḍinī, pātālamahauśadhi and gartālābu; rules for the use of this powder; its curative properties (3.248–254); signs indicating that iron has been killed properly (3.255); another way of preparing a niruttha bhasman (3.256); rules for the steeping (bhāvanā) of iron in particular fluids and for the number of puṭas in order to achieve particular curative effects of the preparation (3.257–259); a divergent opinion on this subject (3.260); further processing of the bhasman of iron, making it suitable to yogavāha⁸⁹² (3.261); the preparation of the bhasman of a metal in general, as required for the achievement of curative properties (3.262–274); the removal of impurities from metals (3.275); the treatment of disorders caused by defective digestion of a bhasman (3.276); colouring (rañjaka) of the body is effected by kāmsya killed by means of punarnavā, iron killed by triphalā, and copper killed by sulphur (3.277);

the purification of zinc (kharpara) (3.278);⁸⁹³ zinc may be killed like tin or copper; its curative properties; zinc (kharpara) is commonly known as yaśada (3.279–280); tin should be killed by means of (hari)tāla, tīkṣṇa(loha) by cinnabar, gold by lead, lead by (manah)śilā, copper by sulphur, and silver by tāpya (= mākṣika) (3.281); methods making a brittle metal malleable (3.282); the general curative properties of bhasmans (3.283); longevity, strength and health are brought about by diamonds, gold and mercury, collectively called amṛtatraya (3.284); praise of the physician thoroughly conversant with the preparation and administration of the eight types of bhasman (3.285–286); the curative properties of the bhasman of iron (3.287–290);

the purification of maṇḍūra (iron oxide)⁸⁹⁴ (3.291); the relative merits of maṇḍūra, dependent on its age (3.292); the characteristics of the useful type of maṇḍūra (3.293); two more methods of purifying maṇḍūra (3.294–295).

Chapter four deals with: the seven upadhātus: mākṣika, tuttha, abhra, nīlāñjana, (manah)śilā, (harit)āla, and rasaka; some add vimalā as the eighth one of the series (4.1);

the mythical origin of mākṣika⁸⁹⁵ (4.2–3); the two types of mākṣika, distinguished according to its colour; the four types, distinguished according to its form (4.4–5); the relative merits of various types of mākṣika (4.6–7); adverse effects of impure mākṣika (4.8); the properties of hema- and rajatamākṣika (4.9);⁸⁹⁶ three methods of purifying mākṣika (3.10–13); adverse effects of unpurified (apakva) mākṣika (4.14); two more methods of purifying mākṣika (4.15–16); preparation of the bhasman (4.17); two more methods of purifying mākṣika (4.18–20); the purification of vimalā, by some regarded as identical with kāmsyamākṣika (4.21–22); the properties and actions of mākṣika (4.23–24); three methods of extracting the sattva (4.25–30); the therapeutic actions of the sattva (4.31–32);

the two types of vimala:⁸⁹⁷ vimala and amala (4.33); the properties and actions of vimala (4.34); the purification of amala (4.35) and vimala (4.36–37); vimala may be killed in the same way as mākṣika (4.38); the therapeutic actions of killed vimala (4.39); the extraction of the sattva (4.40–41); the therapeutic actions of the sattva (4.42);

the mythical origin of sasyaka⁸⁹⁸ (4.43); the colour of the variety of sasyaka called tuttha (4.44); the purification of sasyaka (4.45); the extraction of the sattva (4.46–47); the therapeutic effects of the sattva of mayūratuttha (= sasyaka) (4.48);

the five types of añjana: sauṇḍra, rasāñjana, sroto'ñjana, puṣpāñjana, and nīlāñjana (4.49); the colour of sauṇḍrañjana⁸⁹⁹ and its therapeutic effects (4.50);⁹⁰⁰ its curative actions (4.51); sroto'ñjana⁹⁰¹ occurs in rivers; its curative actions (4.52–53); the properties of puṣpāñjana,⁹⁰² which cures eye diseases (4.54); nīlāñjana⁹⁰³ makes iron malleable; its therapeutic actions (4.55); the purification of añjanas in general (4.56); the purification of nīlāñjana (4.57–58); the sattva of añjanas can be extracted in the same way as that of manāḥśilā (4.59);

the purification and killing of abhra (mica) has already been described; the extraction of its sattva will be discussed afterwards (4.60);

the mythical origin of śilājatu,⁹⁰⁴ a substance exuding from mountains during the summer heat (4.61–62); śilājatu is very heavy due to its association with various metals; the type of association determines the names of its varieties (4.63); seven types are distinguished: suvarṇa-, rūpya-, trapu-, śiṣa-, tāmrā-, lohā-, and manāḥśilāśilājatu;⁹⁰⁵ the best śilājatu occurs in the Vindhya mountains (4.64); the characteristics, properties and curative effects of kāñcana (= suvarṇa)śilājatu (4.65–66), raupyaśilājatu (4.67), tāmrāśilājatu (4.68), trapuśilājatu (4.69), śiṣaśilājatu (4.70), āyasa (= lohā)śilājatu (4.71–72); the necessity of purifying śilājatu (4.73); therapeutic actions of śilājatu (4.74); the colours of the different types may be examined under the influence of fire or water (4.75); the properties and actions of śilājatu in general (4.76–80); the extraction of the sattva; its therapeutic actions and use in the bandha of mercury (4.81–82);

the three types of rasaka;⁹⁰⁶ their characteristics and relative merits (4.83); three other types, distinguished as to colour (4.84); three methods of purification (4.85–87); rasaka becomes very unstable when heated; the sattva or rasa of kiñculu is the only substance that can stabilize it (4.88–89); therapeutic effects of rasaka (4.90); extraction of the sattva (4.91–93); procedures making rasaka heatresistant (4.94–101);

bhūnāgas;⁹⁰⁷ their purification; the extraction of the sattva (4.102–104); the collection and keeping of bhūnāgas; the extraction of the sattva; a ring made with this sattva is effective in poisoning and snake-bite (4.105–107); the bile and feathers of peacocks may be treated in the same way in order to extract a sattva with the same properties (4.108);

the mythical origin of (hari)tāla⁹⁰⁸ and manohvā (= manāḥśilā) (4.109); the four varieties of haritāla: godantaka, piṇḍa, ghaṭalākṛtī, and kīṭānana; the last of these is the best (4.110); adverse effects of unpurified haritāla (4.111); the properties and curative effects of pure haritāla (4.112); the purification of haritāla (4.113–114); another method, by boiling it with the plant called haritālī or haṃsarāja (4.115); the extraction of the sattva; its properties and therapeutic actions (4.116–126); another way of extracting the sattva (4.127–138);

the mythical origin of manāḥśilā (4.139);⁹⁰⁹ its three varieties: śyāmāṅgī, kaṇṭhāntikā, and khaṇḍākhya; the characteristics and relative merits of these varieties (4.140–142);⁹¹⁰ the adverse effects of unpurified manāḥśilā (4.143); its purification (4.144); the properties and actions of purified manāḥśilā (4.145); the sattva should be

extracted in the same way as that of haritāla (4.146);

the eight mahārasas are: rasaka, rasa, śaila, capala, amala, sasyaka, māṅṣika, and darada (4.147); according to another opinion the mahārasas consist of: vaikrāntaka, ayaskānta, vimalā, darada, pavi, tāpya, and rasaka (94.148);⁹¹¹ the rasas consist of: abhraka, tutthaka, kānta, rājāvarta, añjana, vajra, vaikrānta, and ṭaṅkaṇa (4.149); the uparasas are: gandhaka, tālaka, śilā, kṣitikecara, gairika, etc. (4.150); according to the *Rasasindhu* they consist of: gandha, tāla, śilā, tuttha, bhūnāga, nīlāñjana, kāśisa, ṭaṅkaṇa, śaṅkha, kaṅkuṣṭha, and varāṭaka (4.151); according to the *Rasaratnākara* the uparasas are: gandhaka, vajra, vaikrānta, vajrābhra, tālaka, śilā, kharpara, śikhituttha, vimalā, hemamāṅṣika, kāśisa, kāntapāṣāṇa, varāṭa, añjana, rāvaṭa, kaṅkuṣṭha, śaṅkha, bhūnāga, ṭaṅkaṇa, and śilājatu (4.152–153); gandhaka has the nature of a sattva and is therefore described along with mercury (4.154); the eight sādharmaṇarasas, helpful in the processing of mercury, consist of: kampilla, capala, gauripāṣāṇa, navasāraka, kaparda, vahnijāra, girisindūra, and bodāraśṛṅga (4.155–156);

the properties of capala,⁹¹² which is helpful in the bandha of mercury (4.157); the relative merits of the varieties of capala (4.158); the explanation of its name (4.159); capala which remains stable under the influence of fire is the most useful kind (4.160); a second explanation of the name capala (4.161); the preparation of the capala called nāgasamṭbhava,⁹¹³ which is used in the bandha of mercury (4.162–163); capala can be killed in the same way as copper (4.164); the properties and uses of capala and its therapeutic effects (4.165–167); the purification of capala (4.168–169); the sattva can be extracted in the same way as that of abhraka; the use of the sattva in the bandha of mercury (4.170);

the mythical origin of vaikrānta;⁹¹⁴ the explanation of its name (4.171); the site where it occurs; its seven varieties; the best variety is that with the colour of an emerald (4.172);⁹¹⁵ the uses of the varieties (4.173);⁹¹⁶ someone wanting to process vaikrānta should offer homage to Gaṇeśa and Bhairava; the latter deity stays there where vaikrānta is found (4.174);⁹¹⁷ two methods of purifying vaikrānta (4.175–176);⁹¹⁸ two methods for the killing of vaikrānta (4.177–179); the therapeutic effects of (the bhasman of) vaikrānta (4.180–182); two ways of extracting the sattva (4.183–186); a procedure that makes vaikrānta assume the colour of blood; this product has wonderful properties (4.187);

the characteristics of sasyaka⁹¹⁹ (4.188); sasyaka may be purified like māṅṣika, killed like copper or māṅṣika; its sattva may be extracted like that of māṅṣika (4.189); the therapeutic actions of sasyaka (4.190);

kāntaloha is of five varieties: bhrāmaka, cumbaka, karṣaka, drāvaka, and roma-ka;⁹²⁰ these have one to five sharp edges (mukha); kāntaloha is of three colours, yellow, red and black, which represent Brahmā, Viṣṇu and Mahēśvara; the yellow variety is helpful in transmutation, the red one in rasāyana, and the black one in the bandha of mercury (4.191–194); the relative merits of bhrāmaka, etc. (4.195); the characteristics of the five types (4.196); their relative merits again (4.197); bhrāmaka and cumbaka are useful in treating diseases, karṣaka and drāvaka for rasāyana purposes and the processing of mercury (4.198); kāntaloha exposed to wind and the heat of the sun should not be used (4.199); the purification of kāntaloha (4.200–201); ritual offerings to kā-

ntaloha that is to be employed in rasāyana and the processing of mercury (4.202); the successive conversion of bhrāmaka, etc., into cumbaka, etc., by means of goat's blood (4.203); the interactions between kāntaloha and mercury (4.204–205); the extraction of the sattva (2.206–208); kāntaloha may be killed in the same way as iron in general (4.209);

the mythical origin of diamonds (4.210–211); the diamond is the very best among the uparāṣas and mahāraṣas (4.212); diamonds are of four types: brāhmaṇa, kṣatriya, vaiśya, and śūdra;⁹²¹ they are also male, female or napuṃsaka;⁹²² the colours of the brāhmaṇa type, etc., are white, red, yellow, and black (4.213); the characteristics, actions and uses of male, female and napuṃsaka diamonds (4.214–219);⁹²³ the actions and uses of brāhmaṇa, etc., diamonds (4.220–221); the characteristics of the type of diamond suitable to the processing of mercury (4.222); the availability of diamonds in the four yugas (4.223–224); a second set of characteristics of diamonds suitable to the processing of mercury (4.225); a diamond of excellent quality, mounted in a gold ring, wards off, when worn, all diseases (4.226); the beneficial effects of the wearing of diamonds; pregnant women should not wear diamonds, because they arrest the development of the child (4.227–230); adverse effects of unpurified diamonds (4.231); two methods of purification (4.232–234); diamonds may be killed in three ways (gati), resulting in the production of a druti (a fluid form), bhakta (a soft and swollen form), or bhasman (a powder); a druti is superior to a bhakta, a bhakta to a bhasman (4.235); a druti is used for rasāyana and in processing mercury, a bhakta in dhātuvāda, a bhasman in treating diseases (4.236–237); four methods for preparing a druti (4.238–244); the preparation of a bhakta (4.245); four methods for preparing a bhasman (4.246–250); the preparation of the bhasman of diamonds of the brāhmaṇa (4.251), kṣatriya (4.252), vaiśya (4.253), and śūdra type (4.254);⁹²⁴ the preparation of the bhasman of male, female and napuṃsaka diamonds (4.255);⁹²⁵ defects in diamonds (4.256);⁹²⁶

rājāvarta⁹²⁷ is of two types: guṭikā and cūrṇa (4.257); its purification (4.258) and therapeutic actions (4.259); the extraction of the reddish yellow sattva (4.260–261); brahmapiśācikā⁹²⁸ resembles the white variety of ṭaṅkaṇa (4.262); its properties, uses and curative actions (4.263); brahmapiśācikā may be purified like ṭaṅkaṇa (4.264); ṭaṅkaṇa⁹²⁹ is of three types: sphaṭikābha, guḍaprabha, and pāṇḍura, also known as nīlakaṇṭha (4.265); their relative merits (4.266); the actions of ṭaṅkaṇa (4.267); its purification (4.268);

the characteristics of kampillaka,⁹³⁰ which is available in Saurāṣṭra (4.269); its therapeutic actions (4.270);⁹³¹ the characteristics of gaurīpāṣāṇa;⁹³² the usefulness of its bhasman (hatacūrṇaka) in the bandha of mercury; the medicinal properties of the bhasman (4.271);⁹³³

the preparation of the caustic called navasāra or cūlikālavaṇa (4.272);⁹³⁴ the uses and medicinal actions of navasāra (4.273);⁹³⁵ viḍa, also called cūlikālavaṇa, is active against all three doṣas (4.274);⁹³⁶

the colour, aspect and shapes of varāṭikās,⁹³⁷ also called barābara (4.275); the relative merits of various kinds of varāṭikās, according to their weights (4.276); their properties, uses and therapeutic actions (4.277–278ab); there are also other varāṭikās, either male or female; these are heavy and provoke kapha and pitta (4.278cd); the purifica-

tion of varāṭikās (4.279);⁹³⁸ the actions of mercury bound (baddha) by ṣaṅkhas, śuktis, varāṭikās and caustics (4.280);

agnijāra⁹³⁹ consists of the jarāyu, desiccated by the heat of the sun, of agninakras, which live in the ocean (4.281); agnijāra is helpful in the jāraṇa of mercury and possesses a number of medicinal virtues (4.282);⁹⁴⁰

the place of origin and the characteristics of girisindūra⁹⁴¹ (4.283); its uses and therapeutic actions (4.284);⁹⁴²

vedāra⁹⁴³ occurs on the slopes of the Arbuda mountain in Gurjaramaṇḍala (Gujarāt); it is scaly (sadala) and yellow in colour (4.285); vedāra possesses a sattva; it is used in the bandha of mercury, is active against vāta and kapha, cures disorders in males, and is an excellent drug for restoring the black colour of the hair (4.286);⁹⁴⁴

the nature of amṛtaśṛṅga⁹⁴⁵ (4.287); its uses and therapeutic actions (4.288); its common name is bodāraśaṅkha (4.289);

a general method for purifying sādhaṇarāṣas (4.290);⁹⁴⁶ their sattva may be extracted on the same lines as that of mica (4.291);

kaṅkuṣṭha is available in the foothills and mountains of the Himālayas (4.292);⁹⁴⁷ the two types of kaṅkuṣṭha: tālika and reṇuka; their properties and relative merits (4.293); two divergent opinions on the identity of kaṅkuṣṭha; these substances should not be used in the processing of mercury, nor in recipes, because they may bring about numerous disorders (4.294–295); the properties, uses and therapeutic actions of kaṅkuṣṭha (4.296); its purification (4.297);⁹⁴⁸

the preparation of a viḍa, helpful in making mercury digest gold (hemajāraṇa) (4.298); substances to be used in the killing of iron and the digestion of iron by mercury (4.299); the preparation of a substance enabling mercury to digest all sattvas (4.300);

kāsīsa⁹⁴⁹ is of three types; the properties of the yellow type, called puṣpakāsīsa (4.301); the relative merits of the three types of kāsīsa (4.302); kāsīsa is cooling and resembles mercury in its properties; its therapeutic actions (4.303); the purification of kāsīsa (4.304);⁹⁵⁰

the characteristics of gairika⁹⁵¹ (4.305); its properties and curative virtues (4.306); the purification of gairika (4.307);

kāṅkṣī⁹⁵² is of two types: black and yellow (4.308); its properties and curative actions (4.309); the purification of tuvarī⁹⁵³ (4.310);

the characteristics, properties and therapeutic actions of sphaṭikā⁹⁵⁴ (4.311–312); its purification may be carried out on the same lines as that of kāṅkṣī (4.313);

a general method of purification applicable to all the mahāraṣas, rasas and uparāṣas; after this purification, the sattvas can be extracted (4.314–317); a general method for extracting sattvas (4.318–321); signs relative to the flames of the fire, indicating that a sattva has flown out (4.322); the softening of a hard sattva (4.323–326); this softening is necessary because a hard sattva cannot permeate mercury or the human body (4.327); the characteristic colours of the flames during the extraction of particular sattvas (4.328–330); the signs indicating that the process of purifying a metal has been completed (4.331); characteristics of the flames during the extraction of the sattva from copper (4.332); the measurements of the koṣṭhī, required for the extraction of a sattva (4.333); the type of fuel and the way to use it (4.334); the relative potencies of a sattva, a druti,

and a druti added to mercury (4.335); the construction of the koṣṭhī (4.336–337); the qualities required in a physician who devotes himself to alchemical practices (4.338);

all sattvas should be converted into their bhasmans before use (4.339); the sattva of a particular metal, etc., should be purified like the corresponding metal, etc. (4.340); making the particles of a sattva cohere like a kṣoṭa (a solid ball) (4.341); sattvas may be converted into a bhasman by the same methods as those employed in the killing of copper or gold (4.342); metals suitable to the bandha of mercury (4.343–344);⁹⁵⁵

six kinds of salt are distinguished: sāmudra, saindhava, viḍa, sauvarcala, giḍa,⁹⁵⁶ and cūlikā (4.345); the sources of salts and caustics; the origin of yavakṣāra (4.346);⁹⁵⁷ sources of saindhava salt (4.347); the source of sāmudra; places where saindhava is available (4.348); various types of saindhava, their properties, uses and curative actions (4.349–351); the alchemical uses and curative virtues of salt mixed with sulphur (4.352); the shape of salt obtained from a tank (kuṇḍa) containing saline water (4.353);

the groups of substances called madhuratraya (4.354), mitrapañcaka (4.355) and kaṭutraya (4.356), and the alchemical uses of the latter two; the preparation of a dhūtakṣāra from various plants (4.357–358); the preparation of a vṛntakṣāra from various plants (4.359); the preparation of a kṣāra (caustic) in general; its properties; the explanation of the term kṣāra (4.360); the four most important kṣāras (4.361); birds whose excrements may be employed in alchemical procedures (4.362);⁹⁵⁸ the composition of the group of substances called dugdhavarga, consisting of milks and milky saps from plants (4.363–364);⁹⁵⁹ the five upaviṣas: snuḥī, arka, karavīra, lāṅgalī and viṣamuṣṭikā (4.365); the sources of oils employed in processing mercury (4.366–368); the sources of vasā employed in processing mercury (4.369);⁹⁶⁰ animals, whose urine, seed and menstrual discharge are employed in processing mercury (4.370); the groups called pañcagavya, pañcamāhiṣa, pañcāja, and pañcāvi (4.371); the groups of substances, also employed in alchemical procedures, which are called pañcāmṛta (4.372), amlavarga (4.373–375), raktavarga (4.376–377), pītavarga (4.378),⁹⁶¹ śvetavarga (4.379–381), kṛṣṇavarga (4.382),⁹⁶² drāvaṇapañcaka (4.383), śodhanatritaya (4.384), the group of drāvaka plants (4.385),⁹⁶³ the group of kṛmika plants (4.386–387), the groups called aṣṭamūlikā (4.388)⁹⁶⁴ and pañcaratna (4.389),⁹⁶⁵ the group of māraka plants (4.390–394),⁹⁶⁶ the group called apunarjanmakavarga (4.395–396), and the group of divyauśadhis (4.397–399);

descriptions of a series of divyauśadhis and their uses in alchemy and medicine: kṣīprā⁹⁶⁷ (4.400–404), dagdharuhā (4.405–407),⁹⁶⁸ sthalaṇḍapadmiṇī (4.408–409),⁹⁶⁹ nāgadamanī (4.410–414),⁹⁷⁰ uccaṭā (4.415–416),⁹⁷¹ vartulaparṇī (4.417),⁹⁷² rudantī (4.418–420), the three varieties of citraka (4.421–426),⁹⁷³ jyotiṣmatī (4.427–431),⁹⁷⁴ umā (4.432–434), chāyādruma (4.435–445), kaṭutumbī (4.446–448),⁹⁷⁵ kṣīrakanda (4.449–451),⁹⁷⁶ devadālī (4.452–454),⁹⁷⁷ tṛṇajyotiṣ (4.455–456),⁹⁷⁸ and śvetaguñjā (4.457–461);⁹⁷⁹

the preparation and uses of candrodaka (4.462–468),⁹⁸⁰ kartarītoya (4.469–473),⁹⁸¹ viṣodaka and ghr̥todaka (4.474–478),⁹⁸² samjīvanajala (4.479–485),⁹⁸³ śailodaka (4.486–495),⁹⁸⁴ tṛṇodaka (4.496–503),⁹⁸⁵ and uṣṇodaka (4.504–505);⁹⁸⁶

four types of ahiphena, of different colours, deriving from various types of marine animals; their uses in alchemy (4.506–508); another type of ahiphena, black in colour,

deriving from the plant khasakhasa, growing in Miśradeśa (i.e., Egypt); its characteristics (4.509); the purification of ahiphena (4.510); the group of substances called malina, consisting of bhaṅgā, ahiphena and dhuttūra; these substances cure śītajvara and are helpful in the purification of mercury (4.511);

the ten mahāviṣas: kālakūṭa, meṣaśṛṅgī, dardura, halāhala, karkāṭa, granthi, hāridra, raktaśṛṅgī, kesara, and yamadamaṣṭrā; three other mahāviṣas consist of the frothy saliva (phenaka) of three poisonous animals (4.513–514); the composition of the group called pañcāmṛta, useful in medicine and alchemy (4.515–516); yogavāhin poisons used for alchemical and rasāyana purposes (4.517); their doses (4.518); the three main mahāviṣas: śṛṅgī, vatsanābha and kālakūṭa; the remaining poisons are upaviṣas (4.519); the three types of śṛṅgī (4.520); the description, according to another authority, of the two types of śṛṅgī: white and red (4.521–522); another authority again distinguishes three types of śṛṅgī: red, yellow and black; their uses in alchemy and medicine (4.523–524); the shape of meṣaśṛṅgī; its uses in alchemy and medicine (4.525); the eight poisons to be employed in processing mercury: saktuka, mauṣṭika, kaurma, dārvika, sārṣapa, saikata, vatsanābha, and śvetaśṛṅgī (4.526); the characteristics and uses of saktuka (4.527), mauṣṭika (4.528), kaurma (4.529), dārvika (4.530), sārṣapa (4.531), saikata (4.532),⁹⁸⁷ vatsanābha (4.533–534),⁹⁸⁸ kālakūṭa (4.535),⁹⁸⁹ halāhala (4.536), hāridra (4.537),⁹⁹⁰ and yama- or śvadamṣṭrā (4.538);⁹⁹¹ three methods of purifying poisons (4.539–542); drugs counteracting the intensity of the toxic effects of poisons (4.543); the killing of poisonous substances (4.544); therapeutic actions of poisonous substances (4.545); the treatment required when the dose has been too large (4.546–547); the purification of svamaksīrī; its therapeutic actions (4.548–549); the purification of viṣamuṣṭi (4.550), jepālaka⁹⁹² and kanaka (4.551); the preparation of keśataila (4.552–554),⁹⁹³ bolapiṇḍa (4.555–558), kumārīrasa (4.559), and vṛkṣasattva (4.560–568);

nine methods of preparing the druti of mica (4.569–606), three methods for that of gold (4.607–616), a tenth method for that of mica (4.617–623), one method for that of māṅṣika (4.624–625), two methods for that of metals and their sattvas (4.626–630), one method for that of vaikrānta and some other substances (4.631–632), one method for that of pearls and other gems (4.633–634); the preparation of mixtures of drutis and mercury (4.635–637); the dose and the action of such a mixture (4.638–640);

the group of manīrasas: rājāvarta, tuttha, mauktika (pearl), vidruma (coral) and vaikrānta (4.641); the gems used in the bandha of mercury: vaikrānta, sūryakānta, hīraka (diamond), mauktika, candrakānta, rājāvarta, puṣparāga, nīla, padmarāga, pravāḷaka (coral), and vaidūrya (4.642–643);⁹⁹⁴ the group of nine gems: pumvājra (male diamond), garuḍodgāra, māṇikya, vāsavopala,⁹⁹⁵ vaidūrya, puṣpa(rāga), go-meda, mauktika, and pravāḷa (4.644); the mahāratnas are five, the uparatnas four in number; the uparatnas are: pravāḷa, garuḍodgāra, vaidūrya and puṣparāga (4.645); the nine gems associated with the nine grahas are: māṇikya, muktāphala, vidruma, tārṅṣya, puṣpa(rāga), bhidura (diamond), nīla, gomedaka, and vidūrakā; the nine grahas are, in the same order, sun, moon, Maṅgala (Mars), Budha (Mercurius), Bṛhaspati (Jupiter), Śukra (Venus), Śani (Saturn), Rāhu, and Ketu (4.646–647);⁹⁹⁶ gems with auspicious characteristics and of the right jāti should be selected for the

purpose one has in mind (4.648);⁹⁹⁷

the two types of māṇikyā (ruby); its four varieties (4.649); the characteristics of suitable rubies (4.650–651);⁹⁹⁸ rubies suitable to be used in processing mercury (4.652); the eight defects of rubies (4.653);⁹⁹⁹ the medicinal actions of rubies (4.654);¹⁰⁰⁰ the eight types of muktāphala (pearl) (4.655–656); pearls suitable for alchemical purposes (4.657);¹⁰⁰¹ defects of pearls (4.658);¹⁰⁰² the medicinal actions of pearls (4.659); characteristics of suitable and unsuitable types of pravāla (= vidrūma; coral) (4.660–661);¹⁰⁰³ coral needs purification before medicinal use (4.662); the medicinal actions of coral (4.663–665); the four types of garuḍodgāra (emerald) (4.666); emeralds suitable for alchemical uses (4.667); the seven good qualities of emeralds (tārksya) (4.668);¹⁰⁰⁴ defects of emeralds (4.669);¹⁰⁰⁵ the medicinal actions of emeralds (4.670);¹⁰⁰⁶ the eight good qualities of a puṣparāga (topaz) (4.671);¹⁰⁰⁷ bad features (4.672);¹⁰⁰⁸ the medicinal actions of topazes (4.673);¹⁰⁰⁹ the two types of nīla (sapphire), their characteristics and relative merits (4.674);¹⁰¹⁰ the seven good qualities of sapphires (4.675);¹⁰¹¹ the characteristics of the sapphire called mahānīla (4.676); the seven defects of sapphires (4.677–678);¹⁰¹² the medicinal actions of sapphires (4.679);¹⁰¹³ the origin of the gomeda (cinnamon stone); the eight good qualities of gomedas (4.680–681); the defects of gomedas (4.682);¹⁰¹⁴ the medicinal actions of gomedas (4.683);¹⁰¹⁵ the characteristics of a good marakata (a kind of emerald) (4.684); the defects of marakatas (4.685); the medicinal actions of marakatas (4.686); the characteristics of a vaiḍūrya (cat's eye) (4.687); the medicinal actions of vaiḍūryas (4.688); the defects of vaiḍūryas (4.689);¹⁰¹⁶ the characteristics of the rasonikā (a kind of cat's eye) (4.690);¹⁰¹⁷ its curative actions (4.691); the characteristic features of the garuḍodgārapāṣāṇa¹⁰¹⁸ (4.692–693); the curative virtues of this rare and priceless gem (4.694); although unpurified gems do not show adverse effects on administration, they should yet be purified for the increase of their therapeutic virtues (4.695); methods to purify each of the gems (4.696–697);¹⁰¹⁹ the killing of gems (4.698–701);

the extraction of oils in general (4.702);¹⁰²⁰ the extraction of an oil from dhattūra seeds (4.703–705);¹⁰²¹ the same methods apply for the extraction of an oil from the seeds of śigru, muṣkaka, karpāsa, apāmārga and palāśa (4.706–707);¹⁰²² the extraction of an oil from the seeds of añkola, kākatuṇḍī, bākucī and devadālī (4.708);¹⁰²³ from viṣamuṣṭi and jaipāla (4.709);¹⁰²⁴ āragvadha (4.710);¹⁰²⁵ from the seeds of kaṭutumbī, devadālī, paṭolī, indravāruṇī and tiktakośātakī (4.711); kaṭutumbī (4.712);¹⁰²⁶ mahākāla (4.713–714);¹⁰²⁷ from pippalī and the seeds of kākatuṇḍī (4.715);¹⁰²⁸ from the seeds of karañja (4.716); palāśa (4.717);¹⁰²⁹ guñjā (4.718);¹⁰³⁰ jyotiṣmatī (4.719);¹⁰³¹ badara and harītakī (4.720); āmrāḍa (4.721); putrañjīva and raktabīja (4.722);¹⁰³² bilva (4.723);¹⁰³³ kola (4.724–726);¹⁰³⁴ from human hairs (keśatailā) (4.727–728);¹⁰³⁵ the extraction of oils from seeds by means of the heat of the sun (4.729–730);¹⁰³⁶ extraction by means of a pātālayāntra or garbhayantra (4.731–732).¹⁰³⁷

The order of the diseases in the *Āyurvedasaukhyā* is generally the same as in the *Mādhavanidāna*, apart from some additions and minor changes.¹⁰³⁸ The prescriptions are partly of an āyurvedic, partly of a iatrochemical type. Religious and magical elements are rather frequent in Toḍara's therapeutics.¹⁰³⁹

The text contains some passages in prose which are borrowed from commentaries or other works in prose.¹⁰⁴⁰ Many subjects, related in some way to therapeutic prescriptions, are dealt with at some length, e.g., sleep and prescriptions inducing sleep, etc. (III: 4.1290–1327), caustics (kṣāra; IV: 3.213–239), the purification of śilājatu (IV: 6.119–128), śīrobasti (V: 11.309–314), netrābasti (V: 11.316–323), the uses of laṣuna, i.e., garlic (V: 11.569–595), tailapāka, i.e., the preparation of medicated oils (V: 11.801–806), a list of drugs to be purified before medicinal use (V: 11.807–810), a list of drugs to be freshly collected (V: 11.811–814), lists of plants the wood, roots, leaves, flowers, fruits, etc., of which are used in medicine (V: 11.822–835), three groups of fragrant drugs to be added to medicated oils (V: 11.836–847),¹⁰⁴¹ rules for the purification of a long series of drugs (V: 11.868–981), etc.

Sources and authorities quoted or referred to in volumes III–V are: ¹⁰⁴² Agastya, ¹⁰⁴³ Agniveśa, ¹⁰⁴⁴ Aṣṭāṅgakāṇḍa, ¹⁰⁴⁵ the Aśvins, ¹⁰⁴⁶ Ātreya, ¹⁰⁴⁶ Bhāluki, ¹⁰⁴⁶ Bhāradvāja, ¹⁰⁴⁶ Bhāskara, ¹⁰⁴⁷ Bhavānīmata, ¹⁰⁴⁸ Bhāvasvabhāva, ¹⁰⁴⁹ Bhela, ¹⁰⁴⁹ Bhoja, ¹⁰⁵⁰ Bhṛgu, ¹⁰⁵⁰ Bindusāra, ¹⁰⁵¹ Bodhisattva, ¹⁰⁵¹ Brahmā, ¹⁰⁵² Brahmasuta, ¹⁰⁵³ Bṛhadātreya, ¹⁰⁵⁴ Cakrapāṇi, ¹⁰⁵⁵ Caraka, ¹⁰⁵⁶ Carpaṭi, ¹⁰⁵⁷ Cikitsākalikā, ¹⁰⁵⁷ Cikitsākalikāṭikā, ¹⁰⁵⁸ Cintāmaṇi, ¹⁰⁵⁹ Daṇḍapāṇi, ¹⁰⁶⁰ Dhūrjaṭi, ¹⁰⁶⁰ Dravyaguṇamālā, ¹⁰⁶¹ Gadādhara, ¹⁰⁶² Gandhapradīpapatṭikā, ¹⁰⁶² Gandhatantra, ¹⁰⁶³ Gopura, ¹⁰⁶³ Gorakṣa, ¹⁰⁶³ Haramekhalā, ¹⁰⁶³ Hariścandra, ¹⁰⁶⁴ Hārīta, ¹⁰⁶⁴ Indra, ¹⁰⁶⁵ Jālandhara, ¹⁰⁶⁶ Jayadatta, ¹⁰⁶⁷ Jejjāṭa, ¹⁰⁶⁸ Kakṣāpuṭi, ¹⁰⁶⁸ Kalyāṇakāraka, ¹⁰⁶⁸ Kaṇiṣṭhātreya, ¹⁰⁶⁸ Kāṅkāyana, ¹⁰⁶⁹ Kapila, ¹⁰⁶⁹ Kārtavīrya, ¹⁰⁷⁰ Kāśyapa, ¹⁰⁷⁰ Kathaṇḍinātha, ¹⁰⁷¹ Kharanāda, ¹⁰⁷² Kṛṣṇātreya, ¹⁰⁷² Lāyikā, ¹⁰⁷³ Madhyamātreya, ¹⁰⁷³ Mahābhairavanātha, ¹⁰⁷⁴ Mahādeva, ¹⁰⁷⁵ Manthānabhairava, ¹⁰⁷⁶ Matimukura, ¹⁰⁷⁶ Mṛtyuñjaya, ¹⁰⁷⁶ Nāgārjuna, ¹⁰⁷⁷ Nakṣatramālā, ¹⁰⁷⁸ Nala, ¹⁰⁷⁹ Nārada, ¹⁰⁸⁰ Nityanātha, ¹⁰⁸¹ Nivāraṇa, ¹⁰⁸¹ Pālākāpya, ¹⁰⁸¹ Parāśara, ¹⁰⁸¹ Parimalapradīpa, ¹⁰⁸² Pārvaṭi, ¹⁰⁸² Pauṣkalāvata, ¹⁰⁸³ Pūjyapāda, ¹⁰⁸³ Rājahamṣa, ¹⁰⁸⁴ Rasadīpikā, ¹⁰⁸⁴ Rasālamkāra, ¹⁰⁸⁴ Rasarahasya, ¹⁰⁸⁵ Rasarājahamṣa, ¹⁰⁸⁵ Rasarājalakṣmī, ¹⁰⁸⁵ Rasaratnākara, ¹⁰⁸⁵ Rasaratnapradīpa, ¹⁰⁸⁵ Rasaratnāvalī, ¹⁰⁸⁶ Rasārṇava, ¹⁰⁸⁶ Rasasāgara, ¹⁰⁸⁶ Rasasāra, ¹⁰⁸⁶ Rasasindhu, ¹⁰⁸⁶ Rasāvatāra, ¹⁰⁸⁷ Ratnākara, ¹⁰⁸⁷ Rugviniścaya, ¹⁰⁸⁷ Śaivāgama, ¹⁰⁸⁸ Śaivālabhakṣa(ṇa)mata, ¹⁰⁸⁹ Śaivasiddhānta, ¹⁰⁹⁰ Śālihotra, ¹⁰⁹⁰ Saṃnipātakalikā, ¹⁰⁹⁰ Sārasaṃgraha, ¹⁰⁹¹ Siddhasāra, ¹⁰⁹¹ Śiva, ¹⁰⁹² Śivāgama, ¹⁰⁹² Śivarahasya, ¹⁰⁹³ Smṛtiśāstra, ¹⁰⁹³ Śrīnivāsasaṃhitā, ¹⁰⁹⁴ Sūdasāstra, ¹⁰⁹⁵ Suśeṇa, ¹⁰⁹⁵ Suśruta, ¹⁰⁹⁶ Sūtamahodadhī, ¹⁰⁹⁶ Sūtārṇava, ¹⁰⁹⁷ Svachchāṇḍāgama, ¹⁰⁹⁷ Svachchāṇḍasaktyāgama, ¹⁰⁹⁸ Tottala, ¹⁰⁹⁹ Vāgbhata, ¹¹⁰⁰ Vaidyālamkāra, ¹¹⁰¹ Varuṇa, ¹¹⁰² Vāsudeva, ¹¹⁰³ Videha, ¹¹⁰⁴ Vīrabhadra, ¹¹⁰⁴ Viṣṇu, ¹¹⁰⁴ Vṛddhasuśruta, ¹¹⁰⁴ Vṛddhātreya, ¹¹⁰⁴ Vṛnda, ¹¹⁰⁵ Vṛndāraka, ¹¹⁰⁵ Vyāḍi, ¹¹⁰⁶ Yadunandana, ¹¹⁰⁶ and ¹¹⁰⁶ Yogaratnāvalī.

Sources and authorities quoted or referred to in Volume VI are: Agniveśa, ¹¹⁰⁷ Aṣṭāṅgakāṇḍa, ¹¹⁰⁷ the Aśvins, ¹¹⁰⁸ Ātreya, ¹¹⁰⁸ Bhaṭṭarāmamiśra, ¹¹⁰⁹ Bhoja, ¹¹⁰⁹ Caraka, ¹¹⁰⁹ Gopura, ¹¹¹⁰ Gorakṣamata, ¹¹¹⁰ Jejjāṭa, ¹¹¹⁰ Jīvaka, ¹¹¹¹ Kāṅkāyana, ¹¹¹² Kapila, ¹¹¹³ Kharanāda, ¹¹¹³ Kṛṣṇātreya, ¹¹¹³ Pinākin (i.e., Śiva), ¹¹¹⁴ Pūjyapāda, ¹¹¹⁵ Rasarājalakṣmī, ¹¹¹⁵ Saṃkara (i.e., Śiva), ¹¹¹⁶ Suśruta, ¹¹¹⁷ Tārā, ¹¹¹⁷ Vaidyasuradrūma, ¹¹¹⁸ and ¹¹¹⁸ Vaitaraṇa.

Volume VII ascribes recipes to the following authorities: the Aśvins (12.116–121; 15.49–55), Brahmā (16.325–330), Dhanvantari (12.147–148), Kāśyapa (16.308–313), Kṛṣṇātreya (14.47–52), Mahādeva (5.251–264), and Vaidyanātha (5.144). Suśruta is referred to on the subject of the number of eye diseases (16.4–8) and the dimensions of the eye (16.9–10).

Volume VIII ascribes recipes to the Aśvins (4.33–47; 6.21–28; 10.62–68 and 70–

80), Ātreya (1.28–33), Bharadvāja (6.34–42), and Kāśyapa (8.93). Rāvaṇa's *Kumāratantra* forms part of chapter seven on children's diseases.¹¹¹⁹ Large parts of chapters twelve to fifteen were borrowed from the *Śārṅgadharasamhitā*.

Volume IX quotes from or refers to: Agniveśa,¹¹²⁰ Amogha,¹¹²¹ āmnāyavi-dah,¹¹²² Ātreya,¹¹²³ Bhadrāsana,¹¹²⁴ Bhairava,¹¹²⁵ Bhavānimata,¹¹²⁶ Bhela,¹¹²⁷ Bhoja,¹¹²⁸ Brhadātreya,¹¹²⁹ Candranandana,¹¹³⁰ Candrāṭa,¹¹³¹ Candrikā,¹¹³² Caraka,¹¹³³ Cintāmaṇi,¹¹³⁴ Cūḍāmaṇi,¹¹³⁵ Dalhaṇa,¹¹³⁶ Dhūrjati,¹¹³⁷ Dravyaguṇamālā,¹¹³⁸ Gopura,¹¹³⁹ Gopurarakṣita,¹¹⁴⁰ Gorakṣamata,¹¹⁴¹ granthāntara,¹¹⁴² Hārīta,¹¹⁴³ Jaijijāta,¹¹⁴⁴ Jālandhara,¹¹⁴⁵ Jīvanātha,¹¹⁴⁶ Kākacaṇḍeśvara,¹¹⁴⁷ Kākacaṇḍeśvaratantra,¹¹⁴⁸ Kakṣāputi,¹¹⁴⁹ Kalpapradīpa,¹¹⁵⁰ Kāśyapa,¹¹⁵¹ Kharanāda,¹¹⁵² Kṛṣṇātreya,¹¹⁵³ Kṣārāpāni,¹¹⁵⁴ Kṣīrasindhu,¹¹⁵⁵ Lohapaddhati,¹¹⁵⁶ Māṇḍava,¹¹⁵⁷ matāntara,¹¹⁵⁸ Mohāpāla,¹¹⁵⁹ Nāgārjuna,¹¹⁶⁰ Nala,¹¹⁶¹ Nandikācāryatantra,¹¹⁶² Pārāśara,¹¹⁶³ Patañjali,¹¹⁶⁴ Prayogapārijāta,¹¹⁶⁵ Purandararahasya,¹¹⁶⁶ Puṣkalāvata,¹¹⁶⁷ Rājahamṣa,¹¹⁶⁸ Rasacintāmaṇi,¹¹⁶⁹ Rasacūḍāmaṇi,¹¹⁷⁰ Rasadarpaṇa,¹¹⁷¹ Rasakāmadhenu,¹¹⁷² Rasālaṅkāra,¹¹⁷³ Rasāṅkuṣa,¹¹⁷⁴ Rasapradīpa,¹¹⁷⁵ Rasarahasya,¹¹⁷⁶ Rasarājahamṣa,¹¹⁷⁷ Rasārājakaṣmī,¹¹⁷⁸ Rasaratnākara,¹¹⁷⁹ Rasaratnasamuccaya,¹¹⁸⁰ Rasārṇava,¹¹⁸¹ Rasasāgara,¹¹⁸² Rasasāra,¹¹⁸³ Rasasāstra,¹¹⁸⁴ Rasasiddhānta,¹¹⁸⁵ Rasasindhu,¹¹⁸⁶ Rasāvatāra,¹¹⁸⁷ Rasendramāṅgala,¹¹⁸⁸ Ratnadīpikā,¹¹⁸⁹ Ratnākara,¹¹⁹⁰ Rūpāyana,¹¹⁹¹ Śaivāgama,¹¹⁹² Śaivālabhakaṣa,¹¹⁹³ Śārṅgadharā,¹¹⁹⁴ Śaunaka,¹¹⁹⁵ Siddha Nāgārjuna,¹¹⁹⁶ Siddharatnākara,¹¹⁹⁷ Siddhasāra,¹¹⁹⁸ Sindūrāraṇa,¹¹⁹⁹ Śivāgama,¹²⁰⁰ Śivamekhalā,¹²⁰¹ Śivarahasya,¹²⁰² Suśruta,¹²⁰³ Svachanda,¹²⁰⁴ Tottala,¹²⁰⁵ Vācaspati,¹²⁰⁶ Vāgbhaṭa,¹²⁰⁷ Vaidyālaṅkāra,¹²⁰⁸ Varāhamihira,¹²⁰⁹ Vasiṣṭha,¹²¹⁰ Viśvāmitra,¹²¹¹ Vṛddhabhoja,¹²¹² Vṛddhahārīta,¹²¹³ Vṛddhaśaunaka,¹²¹⁴ Vṛddhasuśruta,¹²¹⁵ and Vṛddhavāhaḍa.¹²¹⁶

Other works and authorities quoted in the *Āyurvedasaukhya* are:¹²¹⁷ Atiśādi,¹²¹⁸ Haihaya,¹²¹⁹ Nāgodara,¹²²⁰ Pratāpālaṅkāra,¹²²¹ Rogamurāri,¹²²² Romavedha (?),¹²²³ Trailokyadambara,¹²²⁴ and Udakamañjarī.¹²²⁵ According to P. Peterson,¹²²⁶ the compilers also consulted the work of Kuntīsuta.¹²²⁷

Vol. IX quotes the *Rasārṇava* much more often than indicated in the text. Works cited without any reference to them are the *Rasendracintāmaṇi* and *Rasendracūḍāmaṇi*.¹²²⁸ Other sources left unmentioned are probably Cakrapāṇidatta's *Cikitsāsamgraha*¹²²⁹ and Cāmuṇḍa's *Jvaratimirabhāskara*.¹²³⁰ Many verses found in the *Āyurvedasaukhya* form also part of Bhāvamiśra's *Bhāvaprakāśa*.¹²³¹

The *Ṭoḍarānanda* is quoted in Ananta's *Pratāpakalpadrūpa*, the *Āyurvedīya Khanijavijñāna*, Dattarāma's *Brhadrasarājasundara*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hariprapanna's *Rasayogasāgara*, Hārīśaraṇānanda's *Kūṭipakvarasanirmāṇavijñāna*, Nirāñjanaprasāda Gupta's *Pāradasamhitā*, the *Pākārṇava*, Rāmaprasāda's *Rasendrapurāṇa*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, and Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*.¹²³² It was one of the sources of Kalyāṇa's *Bālatantra* according to Dīpacandra.¹²³³

Special features

Volume I does not contain new material when compared with its sources.

Volume II. Chapter one: the science of āyurveda is said to have been divided into eight branches by Kālamardana (1.14); śalya (surgery) is mentioned first in the list of these eight āṅgas of āyurveda; the division of āyurveda into nine branches, as found in the *Hārītasamhitā*, with the addition of basticikitsā, called agada, is referred to and rejected (1.37–40). Chapter two: the description of the five kinds of vāyu, according to the *Vivekamārtanḍa* (2.8–12), diverges from what is usually found in āyurvedic treatises; interesting are the accounts of āma (2.87–106) and prakṛti (2.203–229). Chapter three: noteworthy are the verses on pācana and dīpana drugs (3.25–42), vīrya (3.81–83), the explanation of a disagreeing vipāka (3.107), two types of prabhāva (hita and ahita; 3.111), pollution of country, water and air (3.236–250), the regimen for day and night (3.262–355), the examination of a patient's strength (balaparīkṣā; 3.359–390) and sātmya (3.391–411).

Chapter four is full of interesting details on metabolism and the physiology of the reproductive organs, embryology, pregnancy, and allied subjects; the verses on anatomy mention the length of the intestine in the male and female (4.235), the function of the phupphusa (4.238), and ten apertures (randhra) of the male body (4.263);¹²³⁴ the verses on the seven layers of the skin and their thickness (in agreement with Su.Śā.4.4) are ascribed to Vasiṣṭha. Chapter five: the description of a kālacakra for ascertaining the span of life left to a patient (5.30–35) probably derives from a Tantric source; patients who are going to die are said to be no longer able to see the three steps of Viṣṇu, i.e., Arundhati, Dhruva and the heavenly Gaṅgā (i.e., the Milky Way), nor the Mātṛmaṇḍala (5.63–64). Chapter six: the verses on nāḍiparīkṣā are said to be from Ātreya, Caraka and *Vṛddhabhārīta*, those on mūtraparīkṣā from Carpaṭi, Gopura, Hārīscandra, Nāgārjuna and the *Śivāgama*,¹²³⁵ those on malaparīkṣā from the *Rudratana*; jihvā- and dantaparīkṣā are said to have been described and propagated by Hārīta in conformity with Brahmā's teachings; nakhaparīkṣā derives from Brahmā; the parīkṣā scheme of the *Āyurvedasaukhya* differs from the more usual aṣṭasthānaparīkṣā, danta- and nakhaparīkṣā being uncommon elements; seven morbid affections of the teeth are described (6.103); several ways of predicting the date of death are described according to a number of Tantric texts (*Narapatīcaryā*,¹²³⁶ *Rasārṇava*, *Yogaratanāvalī*, *Śrīnivāsasamhitā*).

Volume III. One series of thirteen samnipāta fevers is described: sandhiga, antaka, rugdāha, cittavibhramśa or -bhrama, śītāṅga, tandrika, kaṇṭhakubja, karṇika, hāridra(ka), bhugnanetra, raktaṣṭhīvin, pralāpaka, and jihvaka (4.264–532). The fever called abhinyāsa has been added to this series (4.557–691). Usually, this sequence of fevers ends with abhinyāsa¹²³⁷ and does not include hāridra(ka).¹²³⁸ The number of days during which these fourteen fevers endanger the life of a patient is mentioned in a separate list (4.259–262).¹²³⁹ The descriptions partly agree with those found in Cāmuṇḍa's *Jvaratimirabhāskara*,¹²⁴⁰ another part deriving from some unknown source.¹²⁴¹ Three fevers which in other treatises belong to a separate series of samnipāta fevers, phalgu, pākala and phupphunaka, are regarded as varieties of respectively śītāṅga and tandrika (4.533–536);¹²⁴² a fever, described in the same context and called vaidārikakarṇa (4.538–539),¹²⁴³ may be related to the vaidārika of other texts.¹²⁴⁴ Reversed types are described of cātūrthaka, tṛtīyaka, satata and

anyedyuška fever (4.752–759); a synonym of cātūthaka is praskandina. The fevers called raudrajvara,¹²⁴⁰ māhendrajvara, jvareśvara, kālajvara and gambhīrajvara¹²⁴¹ are said to derive from *Kaṇiṣṭhātūreya*.

Volume IV. The chapter on atisāra has verses on four doṣic types of pravāhikā (1.26–28), on jvarātisāra (1.31–67), diarrhoea occurring during the puerperium (prasūtidoṣoṭha; 1.132–134), and on the therapy of prolapse of the rectum (1.195–199). The chapter on grahaṇī describes the varieties of this disorder called samgrahagrahaṇī (2.22) and ghaṭīyantragrahaṇī (2.23), that on agnimāndya the bhasmaka type of the digestive fire (4.14–16 and 41–42) and the disease called daṇḍakālasaka (4.33–34). The chapter on pāṇḍuroga describes the variety of jaundice called pānakī (6.25) and the purification of śilājatu (6.119–128).

Volume V. The chapter on vātavyādhi describes prāṇyāma (11.125), ūrdhva-vāta (11.131), śītavāta (11.133) and kaṭigraha (11.144) as separate disease entities; it also mentions the diseases called jhīṇjhiṇī (11.228),¹²⁴² aṅgulivāta (11.435), prasūtivāta (11.491), and pārśvavāta, also called pasūrikā (11.799);¹²⁴³ the term ādhyavāta occurs rather frequently as a synonym of both vātarakta (11.38, 268, 538) and ūrustambha (13.5; 14.82). The chapter on vātavyādhi contains a list of drugs that should be purified before using them in recipes (11.807–810) and a list of drugs that should be freshly collected (11.811–814). Groups of drugs are enumerated of which the wood (11.822), leaves (11.823–824), fruits (11.925–827), barks (11.828), exudates (11.830), roots (11.833–834) and flowers (11.835) are used in medicine. Fragrant substances employed as additives to medicated oils are divided into three categories: udāsīna (neutral), śatru (unfriendly) and mitra (friendly) (11.838–843). Some verses (11.848–854) are devoted to the process known as vedha (potentiation) in the science of perfumery. The purification of a number of fragrant substances is described according to the *Gandhatantra* (11.866–980).

Volume VI. The chapter on śūla contains descriptions of different forms of this disorder (1.15–25), taken from the *Suśrutasaṃhitā*. Chapter two employs the term jarat-pitta both as a synonym of annadravaśūla (2.12) and as designating a disorder that differs from the latter (2.51).¹²⁴⁴ Chapter eight mentions (8.41) the prostate (pauruṣa) according to the translators, but, the prostate being unknown in āyurvedic literature, pauruṣa can better be translated as penis. Chapter nine adds two types of prameha to the usual series of twenty: khaṭikāmeha (9.22) and pūyameha (9.23). A separate chapter (10) is devoted to kṛśaroga. Chapter fourteen, on vṛddhi, differentiates kuraṇḍa from vṛddhi (14.11) and describes bradhma as a separate disease (14.10). Chapter seventeen includes a description of stanavidradhi (mammary abscess; 17.30–31). Chapter eighteen contains a characterization of raktapāka (18.12–13) and includes the description and treatment of agnidagdha (burns; 18.110–130).

Volume VIII. Three mantras are added to the text of Rāvaṇa's *Kumāratantra*, addressed to Rudra and Khaḍgarāvaṇa. The chapter on rasāyana contains a number of kalpas.

Volume IX. A rarely mentioned substance described is brahmapiśācikā (4.262–264); a rarely mentioned gem is rasonikā (4.690–691).

Noteworthy names of medicinal plants in Volumes III–IX¹²⁴⁵ are: ābhā (V: 11.350,

484, 503, 520),¹²⁴⁶ ajabhārī (IX: 4.392),¹²⁴⁷ ambhodhivṛkṣa (IX: 1.536),¹²⁴⁸ amilāna (VIII: 10.99),¹²⁴⁹ amlaparnī (IX: 2.333),¹²⁵⁰ aśokī (V: 11.839),¹²⁵¹ bahupatrā (VIII: 8.194),¹²⁵² bhīrupatrī (IX: 4.387),¹²⁵³ brahmabīja (IX: 2.133; 4.637),¹²⁵⁴ brahma-kāṣṭha (IX: 3.114),¹²⁵⁵ candramāṃsī (IV: 3.286),¹²⁵⁶ candraprabhā (VI: 9.99),¹²⁵⁷ candrasūrya (V: 11.410),¹²⁵⁸ cettodhātūrī (III: 4.193),¹²⁵⁹ chikkanī (III: 4.371),¹²⁶⁰ chilahiṇḍikā (IX: 3.248),¹²⁶¹ cholāṅgapattra (V: 11.975),¹²⁶² coka (V: 11.699),¹²⁶³ cova (V: 11.670),¹²⁶⁴ daṇḍahasī (V: 11.839),¹²⁶⁵ dehulī (V: 11.839),¹²⁶⁶ dehulikā (V: 11.838), devakaṇḍarikā (IX: 3.223),¹²⁶⁷ dherā (III: 4.371),¹²⁶⁸ durvarṇa (V: 11.719),¹²⁶⁹ dvipabalā (V: 11.161),¹²⁷⁰ ekaparnī (IX: 3.35),¹²⁷¹ gajabalā (IX: 2.42),¹²⁷² gajakusuma (VII: 13.186),¹²⁷³ gartakalambukā (IX: 3.206 and 227),¹²⁷⁴ gartālābu (IX: 3.249),¹²⁷⁵ ghaṭabīja (III: 4.371),¹²⁷⁶ ghaṭākanda (IX: 4.415),¹²⁷⁷ gonarda (V: 11.828),¹²⁷⁸ hanumantikā (IX: 4.391),¹²⁷⁹ harikanda (VI: 1.26),¹²⁸⁰ haritālī (IX: 4.115),¹²⁸¹ harṣaṇī (V: 11.597),¹²⁸² hrddhātūrī (III: 4.309, 425, 485, 587; V: 11.758 and 791),¹²⁸³ hrtparnī (III: 4.661 and 959),¹²⁸⁴ huruhuru (III: 4.371),¹²⁸⁵ ikṣuparnī (V: 11.841),¹²⁸⁶ indrasurī (VI: 10.38),¹²⁸⁷ jalasūkarī (VIII: 10.159),¹²⁸⁸ jvalāmukhī (IV: 8.177; IX: 4.239),¹²⁸⁹ jyotsnikā (IV: 3.55 and 181),¹²⁹⁰ kabāba (IV: 3.286),¹²⁹¹ kā-kavallī (IX: 4.397),¹²⁹² kākinī (VI: 8.87),¹²⁹³ kālānī (VII: 17.95),¹²⁹⁴ kalāpavidālī (VI: 18.147),¹²⁹⁵ kapilikā (IX: 2.175),¹²⁹⁶ karpūrī (V: 11.944),¹²⁹⁷ kaṭhorā (IX: 3.238),¹²⁹⁸ kaṭuhuñcī (IX: 4.397),¹²⁹⁹ kebuba (V: 11.548),¹³⁰⁰ keṅkaṭī (V: 11.640),¹³⁰¹ khaṅgārī (IX: 4.390),¹³⁰² khaṇḍakarṇa (VII: 7.45),¹³⁰³ khurāsāna (VI: 9.126),¹³⁰⁴ kṣāranālī (IX: 4.387),¹³⁰⁵ kṣatriṇī (III: 4.155; V: 11.812),¹³⁰⁶ kṣetradūtī (V: 11.811),¹³⁰⁷ kṣīrakāñcukī (V: 11.357),¹³⁰⁸ kugarachinna (IX: 3.228),¹³⁰⁹ kukkuramardaka (III: 4.499),¹³¹⁰ kukurunda (III: 4.503 and 720),¹³¹¹ kunthaka (VI: 8.56),¹³¹² madhukulyā (VIII: 10.74),¹³¹³ mahāsamudrā (V: 11.833 and 838),¹³¹⁴ maṅgāraka (III: 4.623),¹³¹⁵ meṣakanda (III: 4.1120),¹³¹⁶ moraṭī (VII),¹³¹⁷ nameru (VI: 8.101),¹³¹⁸ pācyā (VI: 8.87),¹³¹⁹ pālindī (VIII: 8.184),¹³²⁰ peyarī (IX: 4.386),¹³²¹ pītavenī (IX: 4.315, 607, 610, 628),¹³²² pīvarī (V: 11.709),¹³²³ potikā (VII: 13.81; 16.233),¹³²⁴ puṭapatrī (V: 11.809),¹³²⁵ rājakarṇa (IX: 3.35),¹³²⁶ raktadantī (IX: 4.390),¹³²⁷ raktavajrī (IX: 4.397),¹³²⁸ rasendravalī (VI: 1.125),¹³²⁹ reṣī (V: 11.808),¹³³⁰ rīṭhā (III: 4.371),¹³³¹ saddināra (III: 4.377),¹³³² śailakarṇī (V: 11.392),¹³³³ śailamuṣṭī (V: 11.922–923),¹³³⁴ śālacīñcā (IX: 3.227),¹³³⁵ śālicīñcī (IX: 3.248),¹³³⁶ śālūkapatnī (IX: 4.429),¹³³⁷ sarjaparnī (VII: 5.200),¹³³⁸ śaśakapriya (V: 11.814),¹³³⁹ śimhavallī (IX: 4.388),¹³⁴⁰ śīrṣikā (V: 11.947–948),¹³⁴¹ sitisāra (VI: 6.26),¹³⁴² smāraṇī (IX: 3.59),¹³⁴³ srāviṇī (VII: 17.95),¹³⁴⁴ sthālīśakalā (V: 11.828),¹³⁴⁵ sūcīpuṣpa (IX: 1.442),¹³⁴⁶ sukāma (V: 11.637),¹³⁴⁷ sukhāspṛṣā (VIII: 4.6),¹³⁴⁸ surabhī (V: 11.976),¹³⁴⁹ suvirā (VII: 17.97),¹³⁵⁰ taja (V: 11.672),¹³⁵¹ tāṛā (IX: 4.398),¹³⁵² triśīras (III: 4.541),¹³⁵³ triśūlī (III: 4.874),¹³⁵⁴ udakarasā (IX: 4.385),¹³⁵⁵ uṣṇāmbu (VI: 1.121),¹³⁵⁶ vārāhakarnī (IX: 4.386),¹³⁵⁷ veṇikā (IX: 1.517),¹³⁵⁸ verojā (VIII: 10.158),¹³⁵⁹ vibhīṣaṇa (V: 11.567–568),¹³⁶⁰ vīra (III: 4.502, 510, 1096).¹³⁶¹

The author

The *Ṭoḍarānanda*, attributed to Ṭoḍaramalla himself,¹³⁶² was actually prepared under his patronage by several scholars of Benares.¹³⁶³ Opinions differ as to whom the general editorship was entrusted. According to some this was Nārāyaṇa Bhaṭṭa,¹³⁶⁴ according to others it must have been someone else, Nārāyaṇa Bhaṭṭa being already advanced

in years at the time of compilation of the work.¹³⁶⁵ The name of Nārāyaṇa Bhaṭṭa is not mentioned anywhere in the *Ṭoḍarānanda*, but it is known for certain that at least one of its sections, the *Jyotiḥsaukhyā*, was composed by Nīlakaṇṭha, son of Ananta.¹³⁶⁶

Ṭoḍaramalla was the son of Bhagavatīdāsa,¹³⁶⁷ who died when his son was still very young. Ṭoḍara belonged to the Ṭaṇḍana clan, was a kṣatriya by caste, hailed from Oudh, and was born either at Laharpur or in Lahore at an unknown date. He is called Rājatoḍaramalla because he descended from the zamīndārs of Oudh.¹³⁶⁸

Ṭoḍara joined the service of Akbar in 1573, rose to the position of vazīr or dīwān in 1582, and died in 1589.¹³⁶⁹

Date

The *Ṭoḍarānanda* has been compiled during 1572–1589.¹³⁷⁰

Trilocana Kavicandra

Trilocana Kavicandra, the father of Kavikaṇṭhahāra,¹³⁷¹ was the author of a *Ratnāvalī*.¹³⁷² He belongs, as does his son, to the sixteenth or seventeenth century.

Vaidyarāja

Vaidyarāja was the author of the *Rasarasāṇava* and *Sukhabodha*.¹³⁷³

The *Rasarasāṇava*¹³⁷⁴ is a short treatise, probably mainly dealing with therapy; it also describes the examination of the pulse, the urine, and the eyes of the patient.¹³⁷⁵

The *Sukhabodha*¹³⁷⁶ is a comprehensive work on therapeutics, written in a clear and easy style. The beginning, describing the descent of āyurveda, is inspired by the *Carakasamhitā*.

Sources mentioned at the end of the work are: Caraka, Madanavinoda, Paribhāṣā, Rasadīpikā, Rasakalikā, Rasamañjarī, Rasaprayoga, Rasaratnākara, Rasendracintāmaṇi, Rasendrakalpadruma, Sārasaṅgraha, Sārṅgadhara, Suśruta, Vāgbhaṭa, and Vaṅgasenaka.

Quoted in the body of the work are: the *Agnipurāṇa*, *Garuḍapurāṇa*, *Gopālasamhitā*,¹³⁷⁷ Rāvaṇa's *Kumāratantra*, Vāsudeva, Viṣṇu, and the *Sārālatikā*.¹³⁷⁸

The author gives his genealogy at the beginning and end of his work. He was a son of Viśārada, son of Vaidyacintāmaṇi, son of Vaidyavācaspati, son of Yadunātha; he was a nephew of Ratnamāṇi.¹³⁷⁹ The *Sukhabodha* was completed in the year 1624 of an unspecified era, i.e., in 1567/68 or 1702/03.¹³⁸⁰

Yaśaḥkīrti

Yaśaḥkīrti was the author of the *Jagatsundarīprayogamālā*,¹³⁸¹ a work on therapy,¹³⁸² written in 1,500 Prakrit verses (gāthā),¹³⁸³ arranged in forty-two or forty-three chapters.

The treatise is especially valuable for its description of fifteen yantras with rather unusual names: airāvaṇa-, bāṇagaṅgā-, bheruṇḍa-, gaṅgā-, gatapratyāgata-,

haṃsaśravā-, jaladurgabhayānaka-, mahā-, meghanādharmāpavarta-, pāṇḍavāmālī-, rājābhyudaya-, vāyu-, vidyādharaṇḍī-, vidyādhārī-, and vidyādhārīṇṭyayantra.¹³⁸⁴

Yaśaḥkīrti was a Jain, and a pupil of Vimalakīrti, in his turn a pupil of Rāmākīrti, of the Bāgada saṅgha.¹³⁸⁵ He is usually placed in the sixteenth century.¹³⁸⁶

Chapter 2 Seventeenth-century authors and works

The *Anūparudrākṣādīparīkṣā*

The *Anūparudrākṣādīparīkṣā* was written by a court poet at the instance of king Anūpasīṃha of Bīkāner (A.D. 1674–1709).¹

Bharatamallika

Bharatamallika² was the author of two works on the genealogy of the Vaidya families of Bengal, the *Candraprabhā*³ or *Vaidyakulapañjikā*,⁴ and the *Ratnaprabhā*.⁵ He also wrote two medical treatises, the *Ratnakaumudī*⁶ and *Sārakaumudī*.⁷

Bharatamallika was a prolific author.⁸ Apart from the works already mentioned, he wrote commentaries on the *Amarakoṣa*,⁹ *Bhaṭṭikāvya*, *Kumārasambhava*, *Raghuvamśa*, *Kirātārjunīya*, *Śiśupālavadha*, and Śrīharṣa's *Naiṣadhacarita*. He also commented on the *Meghadūta*, *Ghaṭakarpara*, *Nalodaya*, and *Gītāgovinda*. His other works are the *Drutabodha* and its commentary, the *Drutabodhinī*,¹⁰ on grammar, and a series of smaller treatises, the *Ekavarṇārthasamgraha*,¹¹ on monosyllabic homonyms, *Dvirūpadhvanisamgraha*,¹² on words of various spellings, *Upasargavṛtti*,¹³ on the prepositions, *Sukhalekhana*,¹⁴ on orthography, and *Kāraṅkollāsa*,¹⁵ on grammar.

The *Candraprabhā*¹⁶ contains a wealth of details on the prominent Vaidya families of Bengal, including the author's own family.¹⁷ Bharatamallika was already of advanced age during the period of its composition.¹⁸ It was completed in 1675/76, as indicated by the author himself.¹⁹

The period of Bharatamallika's literary activity may be fixed as lying between 1650 and 1680.²⁰

Bharatamallika was a son of Gaurāṅgamallika²¹ and descended from the family of Vaidya Harihara Khān.²² He belonged to the village Piṇḍira in the Hūglī district.²³ His forefathers lived in Śrīkhaṇḍa in the Bardvān division. Bharatamallika opened a school at Bhatrigrāma on the Ganges and taught a large number of students. His son was called Rāmacandramallika.²⁴ Bharatamallika was patronized by king Pratāpanārāyaṇa²⁵ of Bhūriśreṣṭha, who reigned in the second half of the seventeenth century.²⁶

Bhāskara

Bhāskara,²⁷ son of the physician Āpājibhaṭṭa,²⁸ who was a resident of Benares (Kāśīkṣetra), grandson of Haribhaṭṭa, great-grandson of Puruṣottamabhaṭṭa of the Agni-

hotrī family and of Kāśyapagotra, who lived at Tryambakeśvarapura²⁹ in Mahārāṣṭra, father of Jayarāma,³⁰ composed a treatise on human anatomy in 110 verses, called *Śārīrapadminī*.³¹ The work dates from 1678/79 and was provided with a commentary, called *Padminīprabodha*, by Vaidyanātha.³²

Other works by Bhāskara are the *Padyāmṛtatarāṅgiṇī*³³ (composed in 1676) and the *Smṛtiprakāśa*,³⁴ which is posterior to the *Śārīrapadminī* because it quotes from the latter.³⁵ Apart from the works already mentioned, Bhāskara wrote the *Adhyātmārāmāyaṇaprakāśa*,³⁶ *Bhāskaracaritra*,³⁷ *Gaṅgāstuti*,³⁸ *Lakṣmīstuti*,³⁹ *Paribhāṣābhāskara*,⁴⁰ *Śuddhiprakāśa*,⁴¹ *Vṛttaratnākaraṣetu*,⁴² and *Yasavantabhāskara*.⁴³

Cidghanānandanātha

Cidghanānandanātha may have been the author of a *Ṣaṭkarmasamgraha*, sometimes ascribed to a Rāghava or Raghuvīra. This treatise is described as a work aiming at a synthesis between pañcakarman and ṣaṭkarman.⁴⁴ Medicinal plants, as well as yogic practices, are prescribed by the author for a number of diseases. The work may date from the seventeenth century.⁴⁵

Devīsīṃha

Devīsīṃha, son of Bharata or Hindupati, king of the Bundelā dynasty (seventeenth century), was the patron of Mohana Bhaṭṭa (author of the *Kāmsavadhamahākāvya*),⁴⁶ the patron and disciple of Śivānanda Gosvāmin (author of the *Śiṃhasiddhāntasindhu*),⁴⁷ and the patron of Durgādatta (author of the *Vṛttamuktāvalī*).⁴⁸ The medical (and astrological?)⁴⁹ work *Śiṃhasudhānidhi* is ascribed to him; a *Pākaśāstra*, *Mallaśāstra* and *Śārīrasthānasamgraha* are probably sections of this treatise.⁵⁰

Dharmavardhana

Dharmavardhana was the author of the *Ḍambhakriyā*,⁵¹ a short treatise in twenty-one verses on cauterization (*ḍambha*), written in Hindī.

The diseases mentioned as to be treated by this method are: jvara, samnipāta, atisāra, samgrahaṇī, pāṇḍu, golā,⁵² śūla, hṛdayaroga, śvāsa, kāsa, raktasāva (haemorrhage), śīrṣaśūla, netraroga, unmādavāta, kaṭivāta, śītāṅgatā, mrgivāta (= apasmāra), kampavāta, śopha, udara, jalodara, aṇḍavṛddhi, and dhanurvāta.

Authorities referred to in the introductory verses are Caraka and Vāgbhaṭa.

Dharmavardhana, a Jain monk of the Kharataragaccha, was a pupil of Vijayaharṣa. He was called Dharmasī (= Dharmasīṃha) before his ordination (dīkṣā) by Jinacandra-sūri. Mahārāja Sujānasīṃha of Bīkāner bestowed honour on him.⁵³

Gopāla

Gopāla was the author of a *Dravyaguṇa*,⁵⁴ composed in 1606, which quotes Cakrapānidatta's *Dravyaguṇa* and a Nārāyaṇa.⁵⁵

Hastiruci

Hastiruci was the author of a short collection of formulae, the *Vaidyavallabha*.⁵⁶

Contents

The treatise consists of about 250 verses⁵⁷ in eight chapters (vilāsa), each of which deals with a group of disorders. Chapter one contains recipes against fevers, chapter two against women's diseases, chapter three against various disorders, chapter four mainly against diseases of the urinary tract, chapter five mainly against diseases of the intestinal tract, chapter six against abdominal diseases, anaemia and jaundice, chapter seven mainly against diseases of eyes, ears, mouth and head, and chapter eight against bhūtas, pretas, poisons, and diverse disorders.⁵⁸

Hastiruci frequently mentions his name at the end of the formulae as the one who devised them.⁵⁹ A small number of recipes is provided with a name.⁶⁰

Sources are not referred to.⁶¹

(Hastiruci's) *Vaidyavallabha* was one of the sources of Pratāpasimha's *Amṛtasāgara*.

Special features

Interesting names⁶² of disorders are: dhāturoga⁶³ in women (2.17); kapālakīṭaka, i.e., head lice (7.11); a kind of ulcer called nāsūra⁶⁴ (7.19); granthivāta (7.36); mallaviṣa (8.5); mṛgī as a term for apasmāra (8.22–23); vīryasrāva, i.e., involuntary loss of semen (8.25);⁶⁵ pādavraṇa (8.26); jānukampa (8.29).⁶⁶ Although snāyuka was known to Hastiruci (7.24–27), he did not include recipes against other diseases added by Vṛnda and later authors, such as vardhma, phiraṅgaroga, somaroga, masūrī and śītalā. Chapter two contains not only a number of formulae which promote fertility in women and counteract abortion, but also some abortifacients (2.18–23) and contraceptives (2.26–31). Medicines against the poisonous effects of opium (nāgaphenaviṣa; 8.6) and mercury (rasaviṣa; 8.9ab) form part of Hastiruci's collection.

The pharmaceutical preparations are mostly of the classical types, with a rather small proportion of rasas; some pākas are also found in the work (5.16; 7.1–5 and 30–34; 8.18–20). Noteworthy is the frequent prescription of ākallaka (4.23; 5.18; 6.3; 7.3 and 35; 8.18, 34 and 39) and opium (ahiphena or nāgaphena; 4.19 and 24; 5.3 and 4; 6.12 and 17; 7.17; 8.6, 27, 30 and 39).

Interesting items from the materia medica are: brahmadarbha (8.30);⁶⁷ gundī (7.24);⁶⁸ gundīvrkṣa (8.25); jāsada (8.30); jāśūsa (2.12 and 31); kāṅgaḍī (8.30); kārelī (1.26; 2.31; 8.24);⁶⁹ khairasāra (6.15); mājūphala (7.20); mastakī (8.30 and 39); meṇa (8.26); sābun (8.26); sūryakṣāra (4.16);⁷⁰ tila (8.26).⁷¹ Honey, not allowed to Jains as an article of food, is freely prescribed in medicines by Hastiruci. The last recipe of the collection (8.38–40) is said to have been devised by Murādisāha.

A Sanskrit commentary on the *Vaidyavallabha* was written by the brāhmaṇa Meghabhaṭṭa of Gautamagotra in 1672/73. This Meghabhaṭṭa was a son of Nīlakaṇṭhabhaṭṭa, a grandson of Kṛṣṇabhaṭṭa, and a great-grandson of Nāgarabhaṭṭa.⁷²

The author

Hastiruci is described as a member of the Tapāgaccha and a disciple of upādhyāya or mahopādhyāya Hitarucigaṇi⁷³ in the colophon at the end of two BORI MSS (Nrs. 281 and 282). He lived in Gujarāt.⁷⁴

Date

Since one of the formulae of the *Vaidyavallabha* is ascribed to Murādisāha, we can infer that Hastiruci lived in the same period or later than Murād, the younger brother of Aurangzīb, who was beheaded in 1661.⁷⁵ This dating is confirmed by the colophon of one of the BORI MSS (Nr. 281), which states that the work was completed in 1670/71.⁷⁶

Jagannātha

Jagannātha, son of Lakṣmaṇa of the Rāḍhā family,⁷⁷ was the author of a *Yogasamgraha*, composed in 1616.⁷⁸ This work refers to Rāvaṇa's *Bālatantra*, i.e., the *Kumāratantra*.⁷⁹

Jayaratna(maṇi)

Jayaratna⁸⁰ or Jayaratnamāṇi⁸¹ was the author of a monograph on fevers called *Jvaraparājaya*.

The work, consisting of 439 verses, deals, after some introductory stanzas (1–7), with the vessels of the body (śīrāprakaraṇa; 8–16), the doṣas (16–51), the origin of fevers (jvarotpattiprakaraṇa; 52–121), the different kinds of fever (122–156)⁸² and their therapy (157–224), clysters (bastikarmādhikāra; 225–369), substances which are salutary or insalutary in fevers (pathyāpathyādhikāra; 370–389), the saṃnipāta fevers (390–431), and the offering called pūrṇāhuti⁸³ (432–439).⁸⁴

Authorities referred to by the author are: Āṅgada,⁸⁵ Ātreya, Bhela, Caraka, Hārīta, Mādhava, Nāgasimha,⁸⁶ Pālakāpya, Pārāśara, Soḍhala, Suśruta, Tisata, Vāgbhaṭa, and Vṛnda.⁸⁷ Cāmuṇḍa's *Jvaratimirabhāskara* is quoted by Jayaratna.⁸⁸

The *Jvaraparājaya* is quoted in Karandīkar's *Nidānadīpikā*.

Jayaratna, a Śvetāmbara Jain,⁸⁹ was a pupil of Bhāvaratna.⁹⁰ He wrote his work in Tryambavatī.⁹¹

The *Jvaraparājaya* was composed in the year 1605/06.⁹²

Kāśinātha

Kāśinātha was the author of a short monograph on indigestion called *Ajīṛṇamañjarī*, *Amṛtamañjarī*, or *Ajīṛṇāmṛtamañjarī*.⁹³

Contents

The treatise consists of sixty verses.⁹⁴ Verses 1–2 describe the four varieties of ajīṛṇa distinguished by Suśruta,⁹⁵ verse 3 is about the general treatment, and verses 4–5

mention the number of days for ajīrṇa, caused by specified articles of diet, to disappear spontaneously.⁹⁶ Verses 6–47 deal with ajīrṇa brought about by a variety of substances and its treatment by means of countermeasures. The verses which follow are devoted to the alleviation of discomforts as a consequence of particular medical treatments⁹⁷ and by the overuse of caustic lime (cūrṇaka) in betel quids (48–52), the prevention of inconveniences resulting from the intake of alcoholic drinks (53–54), the treatment of intoxication by kodrava (55) and betel nuts (pūga; 56), the preparation of vasavāra and sūktā⁹⁸ (57–58), and the usefulness of the latter substance in indigestion by āma (59).

The *Ajīrṇamañjarī* is one of the sources of the *Pāradasaṃhitā*; it is quoted in the prakīrṇaka pariśiṣṭa of the *Ānandakanda*, the *Rasakāmadhenu*, and the *Rasayogasāgara*.

Commentaries on the *Ajīrṇamañjarī* were written by Rājānaka Bhagavanta,⁹⁹ Rāmanātha Vaidya,¹⁰⁰ and Bāladeva.¹⁰¹

Date

The lower limit of the age in which Kāśīnātha lived is provided by MSS dating from 1618,¹⁰² 1676/77¹⁰³ and 1694/95.¹⁰⁴

Kāśīnātha

Kāśīnātha, son of Saṃkara and Rohiṇī, was the author of the *Kāśīnāthapaddhati*, also called *Vaidyakapaddhati* and *Āyurvedasāra*.¹⁰⁵ The treatise deals with all aspects of medicine: weights and measures, the examination of the pulse, the preparation of medicines, kālajñāna, the aetiology, symptomatology and treatment of diseases, emetics and purgatives, and, finally, the purification of metals, etc.¹⁰⁶

The work dates from A.D. 1665/66,¹⁰⁷ which implies that the author is different from the Kāśīnātha of the *Ajīrṇamañjarī*.

The *Kāśīnāthapaddhati* was one of the sources of the *Amytasāgara*.

Kavicandra

Kavicandra, son of Kavikarṇapūra and Kauśalyā, grandson of Vidyāviśārada (a vaidya of Sudhīra on the banks of the Ganges) of the Datta lineage, and the father of Kavibhūṣaṇa and Kavivallabha,¹⁰⁸ was the author of the *Cikitsāratnāvalī* or *Ratnāvalī*, written in Dīrghāṅgī or Dīrghāṅganagara¹⁰⁹ near Vaidyavatī on the Ganges in A.D. 1660/61. Although he does not mention by name any authority, Kavicandra has freely copied Caraka in the introduction, while later on, in the description of the diseases, he has followed Mādhava's *Rugviniścaya* from beginning to end.¹¹⁰

Kṛṣṇānanda Vidyāvāgīśa

Kṛṣṇānanda Vidyāvāgīśa, also called Śrīkṛṣṇavidyāvāgīśabhāṭṭācārya, was the author of the *Ṣaṭkarmadīpikā*.¹¹¹

Contents

The work is a Tantric treatise on ṣaṭkarman in about 1,000 verses, arranged in nine chapters (uddeśa). It is written in the form of a dialogue between Śiva and Pārvaṭī.

The titles of the chapters are: (1) sāmānyadharma, general observances; (2) kuṇḍā-diniyama, general prescriptions on fire sacrifices, etc.; (3) nānāprakāraśāntiniyama, the attainment of śānti, especially the preservation of health and the cure of diseases; (4) vaśyakarman, subjugation; (5–6) stambhanakarman, immobilization; (7) ākarṣaṇa, attraction, and vidveśa, the sowing of dissension; (8) uccāṭanavidhi, eradication; (9) māraṇa, the killing of adversaries.

It is remarkable that not only chapter three, but also the series of chapters from three up to nine, are said to belong to a śāntikalpa. Chapter three contains verses on Tantric procedures aiming at curing several diseases, among which fever holds a prominent place; *Ātharvaṇa*, *Garga*, *Hārīta*, and the *Tantrarāja* are quoted on the subject of fevers.

The *Ṣaṭkarmadīpikā* has all the characteristics of a compilation and refers to a large number of mainly Tantric and Purāṇic sources by name.¹¹²

The author and his date

Kṛṣṇānanda Vidyāvāgīśa, a famous Tantric scholar,¹¹³ who also wrote the *Tantrasāra*,¹¹⁴ was a Varendra brāhmaṇa who lived in Navadvīpa.¹¹⁵ His works may have been composed in the seventeenth century.¹¹⁶

Lakṣmīkuśala

Lakṣmīkuśala was the author of the *Vaidyakaśāraratnaprakāśa*, written in Gujarātī verse (caupāī). Sources mentioned are the *Ātreyanidāna* and *Suśrutasāra*.

Lakṣmīkuśala was a pupil of Jinakuśala of the Tapāgaccha. He completed his treatise in A.D. 1637 and lived in a village called Oḍā near Īḍar in Rāyadeśa.¹¹⁷

Mādhava

Mādhava, son of Harirāma and grandson of Gopajita of Vaṭapaṭṭana,¹¹⁸ a Śrīgaṇḍa brāhmaṇa from Gujarāt, composed his short *Yogasamuccaya* in the seventeenth century.¹¹⁹

Mahimasamudra

Mahimasamudra, called Jinasamudra before his dīkṣā, wrote, in Rājasthānī verse (caupāī), the *Vaidyakacintāmaṇi*, also called *Vaidyakaśāroddhāra* and *Samudra(prakāśa)siddhānta*. This work deals with nidāna and cikitsā.

Sources mentioned are Ātreya, Caraka, Śāringadhara, Suśruta, Vāgbhaṭa, and *Yogaśataka*.

Mahimasamudra was a Śvetāmbara Jain monk who succeeded Jinacandrasūri as an ācārya. He also wrote a commentary on Bhartṛhari's *Vairāgyaśataka* and a play, called *Tattvaprabodhanāṭaka*. He lived in the second half of the seventeenth century.¹²⁰

Mānakavi

Mānakavi, also called Kavimāna and Mānamuni, was the author of the *Kavipramoda* and *Kavivinoda*,¹²¹ two medical treatises written in Rājasthānī. A *Vaidyakaśārasaṃgraha* by the same author is also recorded.¹²²

The *Kavipramoda*¹²³ is a large work in 2,944 verses (caupāi, dohā), arranged in nine chapters (uddeśa).

Authorities referred to are Ātreya, Bheḍa, Caraka, Kharanāda, Suśruta, and Vāgbhaṭa.

The *Kavivinoda*, also written in verse (caupāi, dohā, etc.), is divided into two parts (khaṇḍa). The first part deals with recipes of various types (kaṣāya, cūrṇa, guṭī, etc.), the second part with fevers and their treatment.¹²⁴

Mānakavi¹²⁵ was a pupil of Sumatisumerugaṇi, pupil of Bhaṭṭāraka Jinacandrasūri of the Kharataragaccha.¹²⁶ Another teacher of Mānakavi was Vinayamerugaṇi,¹²⁷ brother of Sumatisumeru.

Mānakavi lived in Bīkāner.

The *Kavivinoda* was completed in A.D. 1688, the *Kavipramoda* in A.D. 1689.

Maṇirāmamiśra

Maṇirāmamiśra, son of Vasanta, was the author of the *Vṛttaratnāvalī*, a short medical treatise written in 1641 or 1642,¹²⁸ and the *Guṇaratnamālā*, written in 1642.¹²⁹ A commentary, called *Vṛttaratnāvalīcandrikā*, on the former work was written by Kālikā- or Kālīprasāda.¹³⁰

Mevārāmamiśra

Mevārāmamiśra was the author of the *Vaidyakaustubha*,¹³¹ a medical citrakāvya,¹³² written in ingenious verses¹³³ in various, usually long metres, which are addressed to a beloved woman who is celebrated in high-flown language.¹³⁴

Contents

The *Vaidyakaustubha*¹³⁵ consists of about 1,200 verses arranged in sixteen chapters (sarga), which chiefly deal with therapy and to a lesser extent with nidāna. General subjects are absent, apart from vamaṇa and virecana. Three chapters are devoted to alchemical procedures and formulae of rasas.

The order of the diseases is largely in agreement with the *Mādhavanidāna*. Their order diverges with respect to the position of udara, pariṇāmasūla, amlapitta and vātarakta; a number of diseases has been omitted altogether, e.g., svarabheda, arocaka, pānātyaya, udāvarta, gulma, ślīpada, upadaṃśa, and śūkaroga.¹³⁶ In a considerable number of cases the etiology of a disease, its symptoms, or both, are not described and prescriptions are given only. In some rare cases the nidāna verses are borrowed

from the *Mādhavanidāna*.¹³⁷ A conspicuous feature is the enumeration of the number of complications (upadrava).¹³⁸

Chapters one to eleven are devoted to the diseases and their treatment along āyurvedic lines. Chapter twelve deals with vamaṇa and virecana, chapter thirteen with the purification, etc., of the dhātus and upadhātus, chapter fourteen with the same type of procedures applied to mercury. Chapter fifteen, by far the longest, contains formulae of rasas against many diseases which are arranged again along the lines of the *Mādhavanidāna*. Chapter sixteen deals with vājīkaraṇa and rasāyana.

Sources referred to by Mevārāma are Caraka (1.1), the *Vṛddhatrayī* (16.88), and a work on karmavipāka (14.72).

Special features

Noteworthy among the diseases mentioned are mūtrarakta (7.4), phiraṅga (7.95–102), somaroga (9.10), mūtrātisāra (9.12), and seven types of śītalā (bṛhaṭī, kodravā, pāṇisahā, sarṣapikā, rājikā, lohitaṃḍalā, carmajā; 10.43–48).¹³⁹ Interesting substances from Mevārāma's materia medica are ākarakarabha (7.95 and 99), dvīpāntaravacā (7.102), rasakarpūra (14.35; 16.9), and a list of divyauśadhis (14.13–22).

The divyauśadhis enumerated are: abhayā, ahidamanī, ahivilocanikā, ajagandha, ākhukarṇī, akṣī, ambaravallārī, ankola, aparākhyā, ārdra, aruṇikā, asitahema, aśmanta, badarikā, bāhlikā, bahupuṭa, bākucī, balā, balī, bhekā, bhekaparṇī, bhujāṅgamaḷatā, bimbi, brāhmī, bṛhaṭī, cakramarda, caṇḍālinī, cāṅgerikā, chilihṇḍa, daṇḍī, devadālī, dhenusurāsā (v.l. dhenurasanā), dhūmasāra, gajakarṇikā, gavākṣī, ghana, ghanarava, girīkarṇikā, guṇjā, halinī, haṃsāṅghri, harinakhī, hastiśuṇḍī, hemavallī, hutabhu-gdamanī, hutāśa, jāṭī, jatu, jhaṣā, jīvantikā, jvalanagarbha, kākajaṅghā, kākavadanā, kālī, kamalacārīṇikā, kaṇā, kāñcanikā, kaṅgunikā, kañcukī, kapi, karavīra, kāravellī, karkotikā, karpāsa, kāśmarī, khaṭī, kokilākṣa, kośātakī, kṣṇatulasī, kṣapāpatilātā, kṣāra, kṣava, kṣīrakanda, kṣīrāṅghriṇa, kukkurī, kumārī, kuntī, lajjāvatī, lavaḷī, madhu, mayūrakaśikhā, mṛgatṛṇa, muṇḍī, murā, mūrvā, musalī, nāgārjunī, navasādara, nīlāhvayā, nimbarājī, nimbuka, palāśa, parṇīdvaya, paṭu (mentioned twice), pīluka, pīyūṣavajra(?), puṅkhā, puṣkaramūla, rajanī, rambhā, rasonaka, rāṣṭrī, ravi, ravivar-tikā, rudantī, ruvūka, śākāṅghriṇa, śaṅkhaṇḍī, sarṣapa, śatapadī, sehūṇḍa, śīgru, śikhi(n), sinduka, sitavibhākara, śrkka, śrīṅga, śrīṅgī, sūraṇa, suvarṇakusuma, taurī, tejovatī, tūlaparṇī, toyakalaśī, trikaṇṭaka, tripattī, tumbī, ūrṇā, vajrakanda, vaṭāṅghri, vidārī, vijayā, vipina, viṣa, viṣamuṣṭika, viṣṇukrāntā, viśvā, vṛṣa, yakṣanayanā, and yavanamūlaka.¹⁴⁰

The author

Mevārāmamiśra mentions his name at the end of the *Vaidyakaustubha* (16.87), adding that he lived in Śūkarakṣetra.¹⁴¹

Date

Since it is very probable that Mevārāma was acquainted with the medical citrakāvyas of Lolimbarāja,¹⁴² he can be assigned to the second half of the seventeenth century.

Mitramiśra

Mitramiśra, son of Paraśurāmapaṇḍita and grandson of Haṃsapaṇḍita,¹⁴³ wrote under the auspices of Virasiṃha, son of Madhukarasāha, grandson of Pratāparudra,¹⁴⁴ the *Vīramitrodaya*,¹⁴⁵ a very large work on dharmasāstra, composed between 1610 and 1640. Parts of the *Lakṣaṇaparakāśa* of this encyclopaedia deal with subjects of medical interest such as the parts of the human body¹⁴⁶ and the qualities of a physician.¹⁴⁷ The chapters on gaja- and aśvalakṣaṇa of the same section are about elephants, respectively horses.¹⁴⁸

Nāgeśabhaṭṭa

Nāgeśabhaṭṭa wrote, in the seventeenth or eighteenth century, the *Mañjūśāsekharā*.¹⁴⁹

Praharaṇa or Yogipraharaṇa

Praharaṇa or Yogipraharaṇa was the author of the *Vaidyālaṃkāra* and the *Vaidyahrdayānanda*.¹⁵⁰

The *Vaidyahrdayānanda*¹⁵¹ is a work of 268 verses in diverse metres, arranged in five chapters (prakāśa). It is written in the form of a dialogue between husband and wife, the latter being addressed in a flowery style reminiscent of the works of Loliṃbarāja and Hastiruci.

Contents

Chapter one (eighty-one verses) begins with a maṅgala in praise of Kṛṣṇa, and deals, after an introduction and some verses on general subjects, with the treatment of fevers (14–81). Chapters two to four are about the treatment of other diseases. Chapter five describes a number of rasayogas against various disorders and for vājikaraṇa purposes.

The order of the diseases disagrees with the scheme of the *Mādhavanidāna*. Chapter two is concerned with atisāra, grahaṇī, arśas, agnimāndya, gulma-plīhan, udara, kṛmi, śūla, hṛdroga, udāvarta, vṛddhi, vidradhi, and ślīpada. The subjects of chapter three are kāsa, śvāsa, hikkā, svarabheda, raktapitta, kṣaya, pāṇḍuroga, śoṭha, vātaroga, vātarakta, ūrustambha, āmavāta, prameha, somaroga, sthauḷa-kārsya, mūtrakṛcchra, mūtrāghāta, and aśmarī. Chapter four describes the treatment of arocaka, chardi, tṛṣṇā, mūrchā, madātyaya, dāha, amlapitta, unmāda, apasmāra, kuṣṭha, śtāpitta, visphoṭa, masūrī, vraṇa, viṣa, bhagandara, upadaṃśa, galagaṇḍa, pādaroga, nakharoga, oṣṭhāroga, kṣudraroga, nāsāroga, mukharoga, kārṇaroga, netraroga, śīroroga, pradara, puṣparodha, garbhiṇīroga, garbhacalana, mūdhagarbha, sūtikāroga, and bālaroga.

The materia medica presents no noteworthy features.

Paying homage to Kṛṣṇa is recommended a number of times (2.16 and 30; 3.17) as a therapeutical measure.

The only authority referred to is Caraka (2.4).

Special features

The chapter on fevers mentions a dāhajvara separately (1.24–27).¹⁵² Chapter two contains recipes against śothātisāra (2.12) and chardiyatisāra (2.13). The only type of mūtrāghāta referred to in chapter three is uṣṇavāta (3.43). Chapter four mentions a small number of kṣudrarogas (4.35–36); it contains a formula against amenorrhoea (puṣparodha).

Some diseases are absent: visarpa, śūkadoṣa, yonivyāpad, and yonikanda; vārdhma, śītālā, and phiraṅga are neither referred to.

The *Vaidyahrdayānanda* mentions a nose-ornament (nāsābhūṣaṃpi); P.K. Gode regarded it as the nose-stud, which, in his opinion, is a typical ornament of South Indian ladies, as contrasted with the elaborate nath of the ladies of Mahārāṣṭra; he concluded that the author hailed from South India.¹⁵³ D.C. Sircar objected to this view, asserting that nose-studs are popular among all classes of women in Eastern India.¹⁵⁴

The author

Yogipraharaṇa¹⁵⁵ was a son of Nīlakaṇṭha of Vatsa gotra, also called Jamadagnideva, who was an astrologer (jyauṭiṣa) and the preceptor of the chief queen of king Vikrama of Nandapura.¹⁵⁶ He was an expert in many sciences.¹⁵⁷

Date

P.K. Gode suggested that the *Vaidyahrdayānanda* has been written after A.D. 1550; his argument was that the expression anaṅgaraṅgapravīṇa (one proficient in anaṅgaraṅga) refers to Kalyāṇamallā's *Anaṅgaraṅga*, a work on the science of love, assigned by some to the closing decades of the fifteenth century. D.C. Sircar objected that Gode's interpretation is open to doubt because the expression mentioned may simply mean 'someone proficient in the art of love'; moreover, the date of Kalyāṇamallā is disputed.

King Vikrama of Nandapura has been identified by D.C. Sircar¹⁵⁸ as Vikrama I of Jayapura¹⁵⁹ in Orissa,¹⁶⁰ who ruled in the third quarter of the seventeenth century. Yogipraharaṇa can therefore be assigned to the second half of that century.¹⁶¹

Raghunātha

Raghunātha was the author of the *Bhojanakutūhala*,¹⁶² a large work in verse, interspersed with glosses and explanatory prose passages, on dietetics and related subjects. It consists of three sections (pariccheda), the first of which has been edited.¹⁶³

Contents

Section one, called dravyaguṇāguṇakathana, deals with grain and pulse (2–25), prepared dishes (siddhāna; 25–58), vegetables, fruits, and condiments (58–121), sugar (122), refreshing drinks (pānaka; 122–123), kāñjika (123–124), milk and other dairy products (125–151), oils (151–155), products of the sugarcane (155–165), honey (165–167), alcoholic beverages (168–169), meat and fish (169–176), water (176–195), poisoned food (196–197), articles of food that should not be taken together (viruddhadravya; 197–199), healthy and harmful foods (pathyāpathya; 199–212),

articles of food that should not be mixed together (saṃyogaviruddha; 212–214), vessels for food (214–215), and miscellaneous subjects (bhojanavidhi, tāmbūlavidhi, ointments for the body, clothing; 215–230). The vernacular names of plants, dishes, etc., are added to the Sanskrit text; ¹⁶⁴ many countries are mentioned in the glosses, ¹⁶⁵ as well as the names of many rivers in the body of the text (180–183). ¹⁶⁶

Sources referred to in section one are: *Abhidhāna* (22; 27; 68; 74), *Bhāvaprakāśa* (2; 8; 58), *Bhoja* (55; 145), *Caraka* (62), *Dhanvantarinighaṇṭu* (76), ¹⁶⁷ *Haimana* (30; 51; 162), ¹⁶⁸ *Hṛdayadīpa* (29; 52; 57), *Janārdanamahodaya* (58), ¹⁶⁹ *Keyadeva* (58; 161; 162), *Kriyāsāra* (28), ¹⁷⁰ *Nighaṇṭu* (many times), ¹⁷¹ *Nighaṇṭurāja* (1), *Pārijāta* (14; 16; 31), ¹⁷² *Prayogapārijāta* (7; 74), ¹⁷³ *Rājanighaṇṭu* (3; 4; 5; 7; 155), ¹⁷⁴ *Suṣeṇa* (7; 21; 32; 44; 142; 143; 146; 156; 175; 228), *Suśruta* (55; 163), *Vāgbhaṭa* (many times), *Viṣṇupurāṇa* (226), and *Vṛddhasuśruta* (186).

Section two treats of ritually unclean articles of food, the Vaiśvadeva offering, and the feeding of guests. Section three, called vibhāvarivilāsa, is concerned with furniture and similar accessories, the physical and spiritual effects produced by different items of that description, and with a number of miscellaneous subjects. ¹⁷⁵

Section two quotes many works on dharmaśāstra, a number of purāṇas, and various other treatises; some of the authorities quoted are: *Āṅgiras*, ¹⁷⁶ *Aparārka*, ¹⁷⁷ *Āpastamba*, ¹⁷⁸ *Āśvalāyana*, *Aśvamedhika*, ¹⁷⁹ *Baudhāyana*, ¹⁸⁰ *Bhāvaprakāśa*, *Bhaviṣya*, *Bhaviṣyapurāṇa*, *Bṛghu*, *Brāhma*, *Brahmapurāṇa*, *Bṛhadyama*, ¹⁸¹ *Bṛhaspati*, ¹⁸² *Candrikā*, *Caturvīṃśatimata*, ¹⁸³ *Devala*, ¹⁸⁴ *Dharmasāra*, ¹⁸⁵ *Dharmasārasudhānidhi*, ¹⁸⁶ *Gārgya*, ¹⁸⁷ *Gautama*, ¹⁸⁸ *Gobhila*, *Hārīta*, ¹⁸⁹ *Hemādri*, *Kāśyapa*, ¹⁹⁰ *Kātyāyana*, ¹⁹¹ *Kūrmapurāṇa*, *Madanaratna*, ¹⁹² *Mādhava*, *Mādhavīya Vyāsa*, ¹⁹³ *Manu*, *Mārkaṇḍeypurāṇa*, *Mitākṣarā*, *Paithinasi*, ¹⁹⁴ *Pārāśara*, ¹⁹⁵ *Pārijāta*, ¹⁹⁶ *Pracetas*, ¹⁹⁷ *Prayogapārijāta*, *Pulastya*, ¹⁹⁸ *Rṣyaśṛṅga*, ¹⁹⁹ *Samgraha*, ²⁰⁰ *Samvarta*, ²⁰¹ *Śaṅkhalikhita*, ²⁰² *Śātātapa*, ²⁰³ *Śaṭtriṃśamata*, ²⁰⁴ *Śaunaka*, *Skānda*, *Smṛtiratnāvali*, ²⁰⁵ *Smṛtisamgraha*, ²⁰⁶ *Smṛtyarthasāra*, ²⁰⁷ *Śulapāṇi*, ²⁰⁸ *Suśruta*, *Taittirīyakaśruti*, *Uśanaś*, ²⁰⁹ *Vasiṣṭha*, ²¹⁰ *Vijñāneśvara*, *Viṣṇu*, *Viṣṇupurāṇa*, *Vṛddhātreyā*, *Vṛddhayājñavalkya*, *Vyāsa*, ²¹¹ *Yājñavalkya*, ²¹² *Yama*, ²¹³ and *Yogīśvara*.

Section three quotes *Āśvalāyana*, *Baudhāyana*, *Bṛghu*, *Brahmapurāṇa*, *Bṛhaspati*, *Candrikā*, *Caraka*, *Devala*, *Devarāta*, ²¹⁴ *Dharmasāra*, ²¹⁵ *Gāruḍa*, *Gautama*, *Hariścandra*, *Harivaṃśa*, *Kārikābhāṣya*, *Kāśīkāṇḍa*, *Kāśyapa*, (*Vaidya*) *Kātyāyana*, *Mādhavīya*, ²¹⁶ *Manu*, *Mārkaṇḍeya*, *Mārkaṇḍeypurāṇa*, *Nārada*, ²¹⁷ *Nārāyaṇadāsanibandha*, ²¹⁸ *Nṛsiṃha*, *Pañcasāyaka*, *Pārāśara*, *Paraśurāmapratāpa*, *Pārijāta*, *Pracetas*, *Prayogapārijāta*, *Ratirahasya*, *Ratnamālā*, *Sahyādrīkhaṇḍa*, ²¹⁹ *Samgraha*, *Sāmudratilaka*, ²²⁰ *Śaṅkha*, *Śaṅkhalikhita*, *Śātātapa*, *Śaunaka*, *Śivarahasya*, ²²¹ *Skānda*, *Smṛtiratnāvali*, *Śrīpati*, ²²² *Strīlakṣaṇa*, *Suśruta*, *Svapnādhyāya*, ²²³ *Vāgbhaṭa*, *Vasiṣṭha*, *Vijñāneśvariya*, *Viṣṇu*, *Vṛddhapārāśara*, *Vyāsa*, *Yājñavalkya*, *Yama*, and *Yogayājñavalkya*. ²²⁴

The *Bhojanakutūhala* is quoted in Dattarāma's *Caryācandrodaya* and the *Bṛhannighaṇṭuratanākara*. A *Kutūhala* is quoted in Ananta's *Pratāpakalpadruma*.

Special features

Four kinds of yāvanāla are described (9); four kinds of kaṅgu (19); cīnāka is differ-

ent from kaṅgu (19); numerous prepared dishes (siddhāṇṇa) are described (25–58); ten types of vegetables (58) ²²⁵ instead of the more usual six; a *śvetasūraṇaka* (61); several types of ālu: mukhālu, piṇḍālu, raktapiṇḍālu, kāsālu, phoḍālu, pāṇiyālu, nīlālu (62); three kinds of cillī (66); two types of jharasī (68); a *dvīpāntaracakramarda* (72); two types of golomikā (73); two types of agastya (74) instead of the six of the *Rājanighaṇṭu*; three types of koṣātakī: koṣātakī, rājakoṣātakī, śīrākoṣātakī (80–81); three types of vṛntāka: vṛntāka, nīlavṛntāka, ²²⁶ *śvetavṛntāka* (87); *phāmpaṭa* (99); ²²⁷ *sītāphala* (103); ²²⁸ *vātakumbha* (105); ²²⁹ *kāsārākhyaphala* (114); ²³⁰ substances that can or cannot be mixed with milk (134–135); substances which can alleviate particular types of ajīṛṇa (203–211).

The author

Raghunātha ²³¹ was the son of Gaṇeśabhaṭṭa, grandson of Raghunātha, and great-grandson of Hariharabhaṭṭa. Raghunātha belonged to the Vasiṣṭha gotra and to the Karhāḍe brāhmaṇas ²³² among the Mahrāṭṭas. His family surname was Navahasta and his family deity Viṣṇu. His guru was Anantadeva, son of Āpadeva, grandson of Anantadeva. Anantadeva, who lived between 1625 and 1675, was a descendant of the Mahrāṭṭa saint Ekanātha. ²³³ He was a versatile scholar and prolific writer. ²³⁴ Anantadeva's father, Āpadeva, was the author of the *Mīmāṃsānyāyaprakāśa*. ²³⁵

Raghunātha was intimately associated with the Mahrāṭṭa saint Rāmadāsa (A.D. 1608–1681), ²³⁶ the preceptor of Śivājī. ²³⁷ He was for a long time (about 1648–1683) in charge of the temple of Raghupati, the headquarters of Rāmadāsa at Chaphal in the Sātārā district, lying on the Man, a tributary of the river Kṛṣṇā. After Śivājī's death (1680) he seems to have settled in Tanjore, where a Mahrāṭṭa kingdom had been established about 1678 by Ekojī Bhosala, ²³⁸ the step-brother of Śivājī. Raghunātha speaks of Dīpāmbikā, also called Dīpābāi, Ekojī's queen, as his patroness.

Apart from the *Bhojanakutūhala*, Raghunātha wrote the following works in Sanskrit: *Cāturmāsyaaprayoga*, ²³⁹ *Dharmāmṛtamahodadhī*, ²⁴⁰ *Janārdanamahodaya*, ²⁴¹ *Kāśīmīmāṃsā*, ²⁴² *Prāyaścittakutūhala*, ²⁴³ *Prayogaratnabhūṣā*, ²⁴⁴ and *Sāhityakutūhala*. In Marāṭhī he wrote: *Govardhanoddhāraṇa*, *Narakavarṇana*, and *Strīdharmā*. ²⁴⁵

Date

The literary activity of Raghunātha may be assigned to the period 1675–1712. A MS of the *Prayogaratnabhūṣā* was completed in 1678 and a MS of the *Bhojanakutūhala* dates from about 1681/82. The *Dharmāmṛtamahodadhī* was completed in 1701 and the *Narakavarṇana* between 1701 and 1712. ²⁴⁶

Raghunātha Paṇḍita

Raghunātha Paṇḍita was the author of (1) *Cikitsāmañjarī*, (2) *Nāḍījñānavidhi*, ²⁴⁷ and (3) *Vaidyavilāsa*.

(1) The *Cikitsāmañjarī* ²⁴⁸ is a therapeutic treatise in 428 skillful verses, ²⁴⁹ arranged in seven chapters (kusuma). The order of the diseases agrees in large measure with the

Mādhavanidāna. The author added verses on emetics (6.93–95) and purgatives (6.96–601), aphrodisiacs (vājīkaraṇa and kāmoddīpana; 6.102–108), rasāyana (7.1–70), and anupāna (7.71–73). The materia medica is of an āyurvedic type, except for the thirty-two rasayogas described in the section on rasāyana of chapter seven.

Authorities referred to are Ātreya (1.2),²⁵⁰ Caraka (7.1),²⁵¹ Suśruta (1.2), and Vāgbhaṭa (1.2). Raghunātha's *Cikitsāmañjarī* shows clearly traces of the influence of Lolimbarāja's *Vaidyavijñāna*.²⁵² The author frequently refers to himself,²⁵³ often in a self-eulogistic way.²⁵⁴

Some diseases or groups of diseases are not separately dealt with: svarabheda, mūrchā, pānātyaya, dāha, unmāda, apasmāra, vātavyādhi, bhagna, nāḍīvaraṇa, upadamśa, śūkadoṣa, masūrikā, and kṣudraroga. A children's disease added is phullikā (6.84) or utphullikā (6.80). The substantive vār is used in the sense of vāri (water).²⁵⁵ Some noteworthy drugs prescribed are akalla (6.18), hirākaśī (6.31),²⁵⁶ kabāba (6.4), kokamba (6.41),²⁵⁷ mārkaṇḍī (1.62; 6.96),²⁵⁸ māyāphala (6.31), śrīṣataila²⁵⁹ (5.38, 39, 48, 49), and vāyidaṅga (3.4).²⁶⁰

Two rasas (śvāsakuthāra, 7.30–32; vaṅgeśvara, 7.37–39) are said to have been used by the author himself.

(3) The *Vaidyavilāsa*²⁶² is a therapeutic treatise in verses²⁶³ of various metres,²⁶⁴ arranged in ten chapters (taraṅga). The first seven chapters repeat almost verbatim the contents of the *Cikitsāmañjarī*, with numerous additions, a few omissions, and occasionally a different order. Chapter eight deals with the purification (śodhana) and killing (māraṇa) of the metals and with other subjects belonging to rasaśāstra. Zinc (yaśada) is absent among the metals and replaced by ārakūṭa (a kind of brass). A disease, called strīprameha, probably identical with somaroga, is mentioned. Chapter nine describes the thirty-two rasas of chapter seven of the *Cikitsāmañjarī*, plus seventeen additional ones. Chapter ten is concerned with the examination of the pulse and of the urine, as well as with the messenger sent to the physician, the characteristics of a good physician, the examination of the patient, and, finally, weights and measures. The eulogistic epithets conferred on the author himself, which are frequent in the *Cikitsāmañjarī*, are absent from the *Vaidyavilāsa*.²⁶⁵ The contents of the *Vaidyavilāsa* prove that it is an expanded and improved version of the *Cikitsāmañjarī*.²⁶⁶

The *Vaidyavilāsa* is quoted in Jñānasarāmaśarman's *Anupānadarpaṇa*, the *Pākamārtanḍa*, *Rasāyanasaṃgraha*, *Rasayogasāgara*, and *Yogaratanākara*.

The author and his date

Apart from the three medical works, Raghunātha Paṇḍita wrote a work on poetics, the *Kavikaustubha*,²⁶⁷ and two treatises on metrics, the *Chandoratnāvalī*²⁶⁸ and *Vṛttasiddhāntamañjarī*.²⁶⁹ He also composed four poems in Marāṭhī, the *Damayanī-svayamvara*,²⁷⁰ *Gajendramokṣa*,²⁷¹ and *Rāmadāsavarṇana*,²⁷² as well as a metrical Marāṭhī version of Jagannāthapaṇḍita's *Gaṅgālaharī*.²⁷³

Raghunātha,²⁷⁴ who hailed from a family surnamed Manohara,²⁷⁵ was the son of Bhikambhaṭṭa and grandson of Kṛṣṇapaṇḍita.²⁷⁶ His place of residence was Campā²⁷⁷

or Campāvati.²⁷⁸ The author adds the following geographical details on the location of this town: "There is a fort (sthāna) named Kollāgiri; on its east lies the town Campāvati, next to it is the family goddess Mahālakṣmī".²⁷⁹ Campā(vatī) has been identified as Caul in the Alibag Talook of the Kolaba district of Mahārāṣṭra,²⁸⁰ which is situated about a mile or two east of the famous fortress of Koralai (Kollāgiri) and has on its eastern border a hillock with a temple dedicated to Mahālakṣmī. Some branches of the Manohara family still live at Caul and worship Mahālakṣmī as their family goddess.²⁸¹

The identity of Raghunātha Paṇḍita with one of several persons called thus has long been a vexed problem and several theories have been developed, which are elaborately discussed by S.L. Katre.²⁸² Raghunātha's life history has been sketched by the latter. He was born about 1640 and spent his early years in Caul. Probably he went to Benares in order to complete his studies. After returning to Caul for some time, he left that city to seek his fortune elsewhere. He may have met Śivājī in the course of his wanderings and settled finally at the court of Ekojī (1676–1683) in Tanjore about 1675. In Tanjore he came in close contact with distinguished visitors, like saint Rāmadāsa and the Marāṭhī poet Ānandatanaya.²⁸³ Most of his works, with the exception of the *Gaṅgālaharī-īkā*, probably composed during his stay at Benares, date from the period 1675–1711. The three medical treatises are from the year 1697²⁸⁴ and belong therefore to the period of Ekojī's successor, Śāhajī II (1683–1711). Raghunātha probably died at Tanjore about 1720 or somewhat later.

Rājīvalocana Dhanvantari

Rājīvalocana Dhanvantari, son of mahopādhyāya Vaidyakanthābharaṇa and Śrīmatī, was the author of the *Siddhayogārṇava*²⁸⁵ and a *Ratnāvalī*.²⁸⁶

The *Siddhayogārṇava* is a work on therapy in ten chapters (upadeśa).²⁸⁷ The treatise begins with the descent (avatāra) of āyurveda to earth, according to the story told in the *Carakasamhitā*. The titles of the ten chapters are: cikitsāṅga, nānā-vidhajvaracikitsita, jvarātisārādicikitsita, krimyādicikitsita, vātavyādhyādicikitsita, amlapittādinivāraṇa, pradarādinivāraṇa, rasāyanādivijñāna, snehaprakriyādivijñāna, and rasādisuddhyādivijñāna.²⁸⁸

Rāma Bhaṭṭa Hosiṅga

Rāma Bhaṭṭa Hosiṅga, son of Bhavānī and Viśvanātha, wrote at the instance of king Anūpasimha of Bikāner (1674–1709)²⁸⁹ the *Amṛtamañjarī*, a work on toxicology in 350 granthas. A *Cikitsāmālatīmālā* in 4,000 granthas, composed by a paṇḍit of Parāśurāmakula at the request of Rāma Bhaṭṭa Hosiṅga, is mentioned by the latter as one of his own works in his *Dānaratanākara*, which also refers to the *Amṛtamañjarī*.²⁹⁰

Rāmacandra Paṇḍita

Rāmacandra Paṇḍita²⁹¹ was the author of the *Rāmaavinoda*²⁹² and *Vaidyavinoda*. He also wrote some kāvyas and a *Sānudrikabhāṣā*. All these works were composed in Rā-

jasthānī.²⁹³

The *Rāmavinoda*²⁹⁴ consists of 1,981 verses (caupāi, dohā, sorāṭha), arranged in seven chapters (samuddeśa). Some of the subjects dealt with are:²⁹⁵ puruṣalakṣaṇa, śārīra, sādhyāsādhyaalakṣaṇa, mūtraparīkṣā, pittakaphavāyuhetu, the nidāna and treatment of several diseases.

Fever is classified into ten types: ajīrṇa-, āhāra-, pitta-, kheda-, vāyu-, dr̥ṣṭi-, kāla-, rakta-, kapha-, and ekāhikajvara (together with anyedyuṣka-, tṛṭiyaka-, and caturthakajvara); hāridraka- and samtatajvara are also mentioned.

The *Rāmavinoda* ends with two additions to the text: a *Nāḍiparīkṣā* (45 verses) and *Mānapramāṇa* (13 verses).

Sources referred to are: Ātreya, *Carakasamhitā*, *Mādhavanidāna*, *Rājamārtaṇḍa*, *Rasacintāmaṇi*, *Rasaratnākara*, *Śārṅgadhara*, *Suśrutasaṃhitā*, *Vāgbhaṭa*, *Vṛnda*, *Yoga-cintāmaṇi*, and *Yogaśataka*.²⁹⁶

The *Vaidyavinoda*²⁹⁷ is an adaptation in Hindī verse (caupāi, dohā) of the *Śārṅgadharaśamhitā*. It consists of 2,525 verses, arranged in three sections (khaṇḍa) with respectively seven, thirteen, and thirteen chapters (adhyāya).

The author and his date

Rāmacandra, a Jain monk of the Kharataragaccha, was a son of Keśavadāsa²⁹⁸ and a pupil of Padmarāṅgagaṇi.²⁹⁹ Padmarāṅgagaṇi's guru was Padmakīrti; the latter's guru was Jinasiṃhasūri.³⁰⁰

The *Rāmavinoda* was completed in Sakkinagara in 1663/64;³⁰¹ the *Vaidyavinoda* dates from 1669.³⁰² Rāmacandra lived during the reign of Aurangzīb.³⁰³

Rāmamāṇikyāsena

Rāmamāṇikyāsena wrote his *Prayogacintāmaṇi* in the seventeenth century.³⁰⁴

Śaṃkara

Śaṃkara was the author of (1) *Vaidyavinoda*,³⁰⁵ (2) *Rasaśaṃkara*, and (3) *Śaṃkarā-khya*.

(1) The *Vaidyavinoda*³⁰⁶ is a *saṃhitā*³⁰⁷ dealing chiefly with nidāna and cikitsā, along with some general subjects. Its therapy is of a mixed type; rasas have a secondary place in it.

Contents

The work consists of 1,750 verses,³⁰⁸ arranged in sixteen chapters (ullāsa).³⁰⁹ After some introductory verses (1–8), definitions of nidāna, prāgrūpa, rūpa, etc. (11–13), a short exposition on nāḍi- (13–21) and mūtraparīkṣā (22–25), and a list of aṣṭas (26–33), the main part of the treatise begins, which describes the nidāna and cikitsā of the diseases (chapters one to fifteen), arranged in basic agreement with the *Mādhavanidāna*, but with a number of additions: bhasmaka (3.16–17), vardhma (6.77 and 10.79–80),

dehadargandhya (10.10–13), vahnidagdha (11.106–119), munnatākhyaroga (12.79–82), sūryasaṃkrāntivisphoṭa (13.129–132), snāyuroga (13.133–139), and śītālā (13.140–158). Only a restricted number of the kṣudrarogas described by Mādhava is dealt with by Śaṃkara; the same applies to the eye diseases. The diseases called somaroga and phiraṅgaroga are absent. Much of the nidāna material seems to consist of free renderings of verses forming part of the *Mādhavanidāna* and borrowings from it, but other sources were evidently also utilized. Chapter sixteen is concerned with various general subjects: disorders by the drinking of polluted water (1–2), vājikaraṇa (4–16), jalayoga (17–21),³¹⁰ vamaṇa and virecana (22–43), technical terms (44–54), medicinal preparations (55–128), weights and measures (129–138), technical terms again (167–177), etc.

Śaṃkara's materia medica contains for the greater part common names of āyurvedic drugs, but rare or new names are also met with. The use of mercury,³¹¹ sulphur, etc., is not inconsiderable, whereas the number of rasas is quite limited.³¹² Alchemical yantras are mentioned sporadically.³¹³ Religious elements are infrequently encountered: Ghaṭotkaca³¹⁴ should be worshipped by patients suffering from śītālā (13.148, 150, 157), as well as Śiva and Gaurī (13.157). Two mantras are found in this work, one with the object of acquiring a son (15.184), the other, quoted from the *Viṣṇupurāṇa*, against snake-bites (15.271).

Sources referred to by Śaṃkara are Hārīta, Pārāśara and Suśruta.³¹⁵

A commentary on the *Vaidyavinoda* was written by Rāmanātha.³¹⁶

A *Vaidyavinoda* is quoted in Ananta's *Pratāpakalpadruma*, Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*, and Nidhi's *Yogasamuccaya*.

A *Vaidyavinoda* was one of the sources of Kalyāṇa's *Bālatantra* according to Dīpacandra.³¹⁷

Special features

Noteworthy in the field of nosology are the following features. The swelling at the root of the ear, usually said to arise at the end of a saṃnipāta fever,³¹⁸ may be found in the initial, middle, and last phase of a fever according to the *Vaidyavinoda* (1.67). The verses on śoṭha mention swelling (śoṭha) arising from śigru (10.56) and bhallātaka (10.58). A new disorder, not mentioned in other sources, is munnatākhyaroga (12.79–82); it is described as a venereal disease characterized by induration and swelling of the prepuce (liṅgacarman), which is caused by sexual intercourse with an affected female. Another infectious disease is kuṣṭha (13.15); the lepromatous type, in which the tip of the nose may become deformed (nāsikāgrīma vibhāgavibhaṅga) or parts of the fingers lost (aṅgulīvigalana), is called galatkuṣṭha (13.56). Udarda and śītapitta are regarded as synonyms (13.67).³¹⁹ A special form of visphoṭa is sūryasaṃkrāntivisphoṭa (13.129–132),³²⁰ in which the recitation of the śītālāmantra is recommended, along with other remedial measures. Śītālā, also called oṣa, is said to be of four types: takrā, orikā, ākasmikā, and śītālā (13.140–158). The term masūrikā seems to be employed as a synonym of oṣa (13.154).³²¹ Diseases of the nail bed are viṣa (14.33) and pūtinakha (14.37) or nakhakoṭipūtibhāva (14.35). In the section on diseases of the ears, an instrument is described that can be used in extracting foreign matter from the ear (the pannagī-

yantra, shaped like the hood of a serpent: 15.19–20).

Remarkable names of medicinal plants are *bhuṇḍikā* (3.27), *candraśūrā* (15.114), *godhāvinī* (9.18), *kārika* (7.30), *ketu* (7.30), *photā* (11.99), *trika* (8.19),³²² and *uṣṭraka-ṇṭha*³²³ (6.109).

Other interesting terms are *dhundha*³²⁴ (15.109 and 118), *dhundhukāra*³²⁵ (15.116), *kabābā* (15.114), and *sīpikā*³²⁶ (11.113; 12.81; 15.115).

(2) *Rasaśaṃkara*.³²⁷

(3) *Śaṃkarākhyā*.³²⁸

The author and his date

Śaṃkara was the son of (Bhaṭṭa) Ananta of Gauḍavaṃśa.³²⁹ He wrote the *Vaidyavinoda* at the request of his royal patron, king Rāmasiṃha, son of Jayasiṃha.³³⁰ This king was identified by S.L. Katre³³¹ as Rāmasiṃha of Amber (1668–1699), son of the Jayasiṃha (1621–1667) who led in 1665 Aurangzib's successful expedition against Śivājī.³³² A MS of the *Vaidyavinoda* dating from 1705/06³³³ confirms that the work belongs to the last part of the seventeenth century.³³⁴

Śivadattamiśra

Śivadattamiśra was the author of (1) the *Śivakoṣa* and its commentary, the *Śivaprakāśa*,³³⁵ and (2) the *Samjñāsamuccaya*.³³⁶

(1) The *Śivakoṣa*³³⁷ is a homonymic dictionary,³³⁸ restricted to the āyurvedic materia medica, in 540 verses, arranged alphabetically according to final consonants; it is accompanied by an auto-commentary, called *Śivaprakāśa*.³³⁹

The method followed and the technical terms used are explained by the author in the introductory verses, which also refer to a series of lexica as sources: *Śabdārṇava*,³⁴⁰ *Ajaya*,³⁴¹ *Amara*,³⁴² *Vopālita*,³⁴³ *Siṃha*,³⁴⁴ *Medinī*,³⁴⁵ *Viśva*,³⁴⁶ *Hārāvālī*,³⁴⁷ *Halāyudha*,³⁴⁸ *Śāśvata*,³⁴⁹ *Haima*,³⁵⁰ and *Trikāṇḍaśeṣa*.³⁵¹ No sources are mentioned in the body of the text.³⁵²

The *Śivakoṣa* was one of the sources of Raghunāthaji's *Nighaṇṭusaṃgraha*.

The auto-commentary on the *Śivakoṣa*, called *Śivaprakāśa*,³⁵³ is a very valuable work which explains each word of the koṣa and quotes profusely from a large number of authorities. Repeatedly added are the local names of plants³⁵⁴ and the countries where they are found.³⁵⁵

Sources mentioned in the *Śivaprakāśa* are:³⁵⁶ *Abhidhānacūḍāmaṇi*,³⁵⁷ *Ajaya*,³⁵⁸ *Amara*,³⁵⁹ *Amaracandra*,³⁶⁰ *Amaramālā*,³⁶¹ *Anekārthāḥ*,³⁶² *Anekārthadhvanimañjarī*,³⁶³ *Āścaryamañjarī*,³⁶⁴ *Aśokamālā*,³⁶⁵ *Aṣṭāṅgasamgraha*, *Ātreya*, *Bāṇabhaṭṭa*, *Bhāravi*, *Bhavabhūti*, *Bhāvagaṇanāmamālā*,³⁶⁶ *Bhāvagaṇaratnamālā*,³⁶⁷ *Bhāvamīśra*, *Bopadeva*,³⁶⁸ *Cakra*,³⁶⁹ *Candra*,³⁷⁰ *Candranandana*,³⁷¹ *Ḍallaṇa*, *Damayantikāvya*,³⁷² *Daṇḍin*, *Devala*,³⁷³ *Dhanvantari*,³⁷⁴ *dhānvantarīyāḥ*,³⁷⁵ *Dharaṇi*,³⁷⁶ *Dharmadāsa*,³⁷⁷

Dharmiṣṭha,³⁷⁸ *Dvirūpakoṣa*,³⁷⁹ *Gālava*,³⁸⁰ *gāndhikāḥ*,³⁸¹ *gosvāmigopeśvarāḥ*,³⁸² *Guṇaratnamālā*,³⁸³ *gurjarāḥ*, *Haima*,³⁸⁴ *Hāla*(bhūbhuj), *Halāyudha*, *Hārāvālī*, *Haṭṭa-candra*,³⁸⁵ *Hemacandra*,³⁸⁶ *Hemādri*, *Hṛdayadīpaka*,³⁸⁷ *Indu*,³⁸⁸ *Jejjhaṭa*, *Kālidāsa*, *Kesaramālā*,³⁸⁹ *Keśava*,³⁹⁰ *Keyadeva*,³⁹¹ *Kumāra*,³⁹² *Locana*,³⁹³ *Lolimbārāja*, *Madanapāla*, *Madanavinoda*, *Madguruvalabbhā*,³⁹⁴ *Mādhava*,³⁹⁵ *Mādhavī*,³⁹⁶ *Māgha*, *Mālā*,³⁹⁷ *Medinī*, *Meghadūta*, *Mitākṣarā*, *Mukuta*,³⁹⁸ *Nāmaguṇamālā*,³⁹⁹ *Nāmamālā*,⁴⁰⁰ *Nānyadeva*,⁴⁰¹ *Nārāyaṇabhaṭṭa*,⁴⁰² *Nighaṇṭu*, *Pañkajabhaṭṭa*,⁴⁰³ *pāścātyāḥ*, *Prabhāvatīharanacampū*,⁴⁰⁴ *prācyāḥ*, *Prāñca*,⁴⁰⁵ *Puruṣottama*,⁴⁰⁶ *Rabhasa*,⁴⁰⁷ *Raghu*,⁴⁰⁸ *Rājanighaṇṭu*,⁴⁰⁹ *Rāma*,⁴¹⁰ *Rāmāśrama*,⁴¹¹ *Rantideva*,⁴¹² *Rasaratnasamuccaya*, *Rasāyanaprayoga*,⁴¹³ *Ratnakoṣa*,⁴¹⁴ *Rudra*,⁴¹⁵ *Rūpanārāyaṇa*,⁴¹⁶ *Śabdārṇava*,⁴¹⁷ *Samgraha*,⁴¹⁸ *sāmyātrikāḥ*,⁴¹⁹ *Śāśvata*,⁴²⁰ *Siddhamantra*,⁴²¹ *Siddhamantraprakāśa*,⁴²² *Siṃha*,⁴²³ *Somanandin*,⁴²⁴ *Śrīgārahāra*,⁴²⁵ *Śubhāṅka*,⁴²⁶ *Subhūti*,⁴²⁷ *Suśruta*, *Sūtra*,⁴²⁸ *Śvāmin*,⁴²⁹ *Tārapāla*,⁴³⁰ *Trikāṇḍaśeṣa*,⁴³¹ *Ujjvaladatta*,⁴³² *Utpalini*,⁴³³ *Vācaspati*,⁴³⁴ *Vāgbhaṭa*, *Vaijayantī*,⁴³⁵ *Vāpyacandra*, *Vidagdhamukhamāṇḍana*,⁴³⁶ *Vidvadvaidyavallabhā*,⁴³⁷ *Viśva*,⁴³⁸ *Viśvalocana*,⁴³⁹ *Viṭṭhalakṛṣṇabhaṭṭa*,⁴⁴⁰ *Vopālita*,⁴⁴¹ *vṛddhāḥ*, and *Vyāḍi*.⁴⁴²

The author

Śivadatta⁴⁴³ was the son of Caturbhujā,⁴⁴⁴ who belonged to the Karpūra family.⁴⁴⁵ He got his training in āyurveda from his father.⁴⁴⁶ Śivadatta's son, Kṛṣṇadatta, wrote a commentary on Trimalla's *Śataśloki*.⁴⁴⁷ Śivadattamiśra may have joined other paṇḍits of Benares in congratulating Kavīndracārya Sarasvatī for his successful efforts in getting the pilgrim tax at Benares, reimposed by the emperor Shāh Jahān, remitted.⁴⁴⁸

Date

As indicated at the end of the work, the *Śivakoṣa* was completed in A.D. 1677/78.

Śivamiśra

Śivamiśra was the author of the *Vaidyaśāstraśivānubhava*, a work of a compilatory character in five sections.⁴⁴⁹

The first section, dealing with the aetiology and symptomatology of diseases, closely agrees with the *Mādhavanidāna*. The second section discusses some general subjects first, but is mainly devoted to therapy and consists of prescriptions which include rasas; it has also a chapter, called *vīryastambhanādyadhikāra*, which contains formulae to increase the size of the penis in men and that of the breasts in women, to promote potency in men and fertility in women, etc., as usual in medical treatises of later periods; it describes sneha, vamaṇa, virecana and related subjects as well. The third section is concerned with the purification of mercury, some metals, etc., and with the preparation of medicines containing chiefly inorganic substances. The fourth section deals with the medicinal qualities of foods, and the fifth section with the substitutes for a number of drugs. The work ends with verses on karmavipāka.

Sources referred to are: *Bhāvaprakāśa*, *Cakradatta*, *Caraka*, *Gorakṣa*, *Kunda*(?), *Mādhavakara*, *Rājamārtanḍa*, *Rasabhāskara*, *Rasadarpaṇa*, *Śāringadhara*, *Śivadāsa*,

Śrīśailanātha, Vacasiṃha(?), Vāgbhaṭa, and Vṛnda.

The *Śivānubhava* is one of the sources of the *Bṛhadrasarājasundara*.

The introductory verses give the following genealogy of the author: Gaṅgādharma (well versed in āyurveda, of Śaṅḍilyagotra, belonging to a Śākadvīpa family living in Bhalunīpura of the Dānavāri region)—Śaśidhara—Divākara—Narahari—Haricandra—Hari—Śivamiśra.

Śivamiśra states that he wrote his work at the request of some famous physicians connected with the court of Shāh Salem (i.e., Akbar's son Salīm, who assumed the title of Jahāngīr after his accession to the throne).

The date of the work is indicated in the text as the year 1661 of the Vikrama era, i.e., A.D. 1604/05.

Trimallabhaṭṭa

Trimallabhaṭṭa was the author of four medical works: (1) *Yogatarāṅgiṇī*,⁴⁵⁰ (2) *Bṛhadyogatarāṅgiṇī*,⁴⁵¹ (3) *Vaidyacandrodaya*,⁴⁵² and (4) *Dravyagūṇasātaśloki*.⁴⁵³ He also wrote the *Alaṃkāramāñjarī*,⁴⁵⁴ *Vṛttamāñikyamālā*,⁴⁵⁵ and, according to some, the *Yogacandrikā*.⁴⁵⁶ and a commentary on Sukhalatā's *Sātaśloki*.⁴⁵⁷ His authorship of the *Rasadarpaṇa* is disputed.⁴⁵⁸

(1) The *Yogatarāṅgiṇī*⁴⁵⁹ is a treatise of about 2,750 verses, arranged in eighty-one chapters (taraṅga). Chapter one is of an introductory nature and deals, amongst other things, with the tridoṣa doctrine. Chapter two is about weights and measures; it reproduces *Śārṅgadharaśaṃhitā* I.1.14cd–44ab and 39cd–42 without mentioning this source; some verses from *Kṛṣṇātreya* are quoted at the end. Chapter three contains rules for the preparation of medicines and enumerates a number of substitutes for particular medicinal substances; 3.1–9 is identical with *Śārṅgadharaśaṃhitā* I.1.44–45. Chapter four is about medicines with a fatty basis (sneha); the verses are partly from *Śārṅgadharaśaṃhitā* III.1. Chapters five to nine describe the five procedures belonging to pañcakarman: sveda, vamaṇa, virecana, basti and nasya. The source of the larger part of these chapters is the *Śārṅgadharaśaṃhitā* again (III.2–8); the chapter on virecana adds some formulae, some of which are rasayogas. Chapters ten to eleven, on dhūmapāna and raktasrutī (bloodletting), have, once again, been borrowed from the *Śārṅgadharaśaṃhitā* (III.9 and 12). The next five chapters are devoted to nāḍīparīkṣā (12),⁴⁶⁰ vastra- and jihvāparīkṣā (13), chāyāpuruṣalakṣaṇa (the examination of one's shadow as a prognostic procedure) and mūtraparīkṣā (14), dūta- and malaparīkṣā (15),⁴⁶¹ netraparīkṣā,⁴⁶² śakuna (omina) and svapna (dreams) (16). Chapter seventeen is concerned with alchemy. Chapter eighteen is about the preparation of svarasa, kalka, kvātha, yavagū and related fluids, bhakta and maṇḍa, phāṇṭa, śitakaṣāya, cūrṇa, vaṭikā, and avaleha; it also enumerates groups of medicinal substances.

Chapters nineteen to seventy-eight deal with diseases and their treatment. Chapters seventy-nine and eighty are concerned with rasāyana and vājīkaraṇa. Chapter eighty-one describes the seasons and the regimen to be observed during each of them.

The diseases are enumerated at the beginning of chapter nineteen (1–9). Their order in the *Yogatarāṅgiṇī* is largely in agreement with the *Mādhavanidāna*. Ānāha, however, is not described, and referred to once only in a formula of the chapter on udāvarta (45.15). A chapter on ūrustambha is missing. Gynaecology and obstetrics are dealt with in three chapters, on pradara, sūtīkāroga, and strīroga; yonikanda is not described, neither referred to. Diseases added to those mentioned in the *Mādhavanidāna* are bhasmaka (242.1–2), kuraṇḍa (55.2), bradhna (56.1), and snāyuka (67.1).

The verses on nidāna are in many cases few in number or, in rare cases, even absent.⁴⁶³ The majority have been borrowed from the *Mādhavanidāna*, either referred to by name or not;⁴⁶⁴ a minority are from other sources, some of which mentioned by name.⁴⁶⁵ The verses on therapy are arranged in such a way that the rasayogas follow upon āyurvedic prescriptions. Religious therapy and magic are also represented, especially in the chapters on masūrīkā (67), sūtīkāroga (75), and bālaroga (77).

The *Yogatarāṅgiṇī* is a compilatory work⁴⁶⁶ that quotes a large number of sources. Nevertheless, as already indicated, numerous stanzas remain anonymous.

The sources of the *Yogatarāṅgiṇī*, as found in edition a, are: *Alaṃkāra* (44.1),⁴⁶⁷ *Ārogyadarpaṇa* (20.59–60, 113–114 and 123),⁴⁶⁸ *Asviniṅkumārāsāṃhitā* (71.55–56),⁴⁶⁹ *Bauddhasarvasva* (17.62–69 and 79–84; 29.13–16; 64.6),⁴⁷⁰ *Bhallūka* (19.35–72),⁴⁷¹ *Cakradatta*⁴⁷² (20.1–4 and 11; 60.45–46; 75.4; 80.65–66), *Caraka* (27.15; 49.6–11), *Carpaṇī*⁴⁷³ (79.21), *Cikitsā* (21.24–25; 22.12; 23.44–46; 27.9–11; 70.3–4 and 11; 80.15),⁴⁷⁴ *Cikitsādīpa* (29.4),⁴⁷⁵ (*Tisāṭa*'s) *Cikitsākalikā* (20.63; 21.15; 23.27–28),⁴⁷⁶ *Dhanvantari* (242.5–13),⁴⁷⁷ *Hārīta* (27.33–36), *Kalikā* (71.15, 25 and 63; 79.16),⁴⁷⁸ *Kṛṣṇātreya* (2.30–31; 70.15–16; 71.31),⁴⁷⁹ *Lolimarāja* (28.28),⁴⁸⁰ *Madanapāla*⁴⁸¹ (20.18–20), *Manthānabhairava* (24.44–53),⁴⁸² *Matimukura* (71.44 and 49), *Nāgārjuna* (14.13), *Nārāyaṇīya* (29.2),⁴⁸³ *pāścātyadeśāgatayogin* (20.36–37), *Rājamārtaṇḍa* (244.8–9; 26.30; 34.5–6; 50.8; 57.19–21; 69.19; 71.26 and 32; 75.34; 76.3; 77.8 and 18; 79.8; 80.110), *Rasadarpaṇa* (3.12),⁴⁸⁴ *Rasamañjarī* (80.79–84),⁴⁸⁵ *Rasaratnapradīpa* (17.74–77; 23.52–53; 24.13–14; 25.1 and 29–31; 27.76–78; 28.21–25; 29.12; 32.8–11; 34.9; 38.23; 39.8–10; 41.1–2; 47.5; 50.1 and 11; 51.29; 64.13–14; 71.3; 80.79–84),⁴⁸⁶ *Rasārṇava* (24.35–43 and 54–59; 27.49–53), *Rasasindhu* (242.14–16), *Rasendracintāmaṇi* (243.1–3 and 21–24; 26.42–45; 41.39–40), *Rasendrasaṃhitā* (243.17–20), *Rugviniścāya* (244.1; 35.1; 37.1; 38.1–2; 50.2; 52.1–2; 60.1), *Samgraha*⁴⁸⁷ (44.11–14), *Sārasaṃgraha* (20.75, 85, 92, 157–158; 25.10–13; 27.54–57 and 72–75; 28.31–32; 30.6–10; 33.3; 34.7–8; 40.12–22; 41.24–25; 48.11–18; 51.19–21; 71.33 and 64–65; 81.1–14),⁴⁸⁸ *Śārṅgadhara* (20.48, 52, 57–58, 95, 111–112, 192–193; 27.42–48; 28.16–17; 30.2; 40.100–111 and 123–129; 41.16–20 and 33–38),⁴⁸⁹ *Sarvasaṃgraha*⁴⁹⁰ (25.4), *Saugatasimpha*,⁴⁹¹ *Śivāgama* (14.2), *Suśruta* (23.7; 27.4–5; 29.3; 33.2; 50.4), *Vāgbhaṭa* (75.3 and 57–62), *Vaidyadarpaṇa*⁴⁹² (71.54), *Vaidyālaṃkāra* (69.21–25),⁴⁹³ *Vasantarāja*⁴⁹⁴ (17.58–61; 29.17), *Vīrasimhāvaloka*⁴⁹⁵ (241.13–17; 25.21; 25.21; 34.1; 35.2–8; 38.20–21; 39.4–5), *Vṛnda* (20.29–32, 41, 45, 49, 62, 71, 74, 93–94, 103–106, 118, 176–177; 21.22–23 and 43; 22.7, 11, 22–23; 23.38–41; 241.19–22; 244.12; 25.2–3, 7–9, 27; 26.2–6; 28.11–15; 29.8–11; 30.1; 31.3–4; 33.5–7; 34.2–4; 38.22; 39.2–3; 40.26–28; 41.3, 5–6, 7–15, 32; 42.9 and 10–16; 43.1 and 6–11; 44.7–10; 45.5–6; 47.4;

48.10; 51.3 and 5–9; 53.1; 58.8; 62.26; 69.16; 77.40–41; 79.11; 80.10 and 32–36), *Yogaratra*⁴⁹⁹ (33.4), *Yogaratanapradīpa*⁵⁰⁰ (71.62), *Yogaratanāvalī* (20.81–82; 21.42; 22.26–27; 23.49; 24.23; 25.27; 26.13–16; 28.26–27; 39.6–7; 40.2–4; 41.22–23 and 26–31; 42.17–25; 64.7–8, 15–19, 25–26; 69.15; 70.14; 71.18–24 and 46–48; 72.5–6), *Yogasāra* (25.14 and 15–18), and *Yogaśata* (20.40, 46–47, 65, 115; 244.2; 27.12–14; 50.9; 51.4).

The Hindī commentator of ed. a adds: *Ātreya* (8.31–40), *Bṛhadātreya* (8.31–40), *Gorakṣa* (3.18), *Rasacintāmaṇi* (17.22–26), *Rudratāntra* (15.4–10), *Vṛddhahārīta* (12.1–10), *Vṛddhaśaunaka* (3.22), *Yamalagrantha* (16.1–7), and *Yogapārijāta* (8.55–58). Ed. b⁵⁰¹ adds: *Bṛhadātreya* (8.31–40), *Prayogapārijāta* (8.49–54),⁵⁰² *Rudratāntra* (15.4–10),⁵⁰³ *Tisatācārya* (1.42–54), *Vṛddhahārīta* (12.1–10),⁵⁰⁴ and *Yāmala* (16.1–7).⁵⁰⁵ A. Rahman⁵⁰⁶ adds *Gorakṣamata* and *Rasamārga*. The NCC mentions the *Pīyūṣasāgara* as a work quoted in the *Yogatarāṅgiṇī*.⁵⁰⁷

Some of the sources of the *Yogatarāṅgiṇī* are not referred to in the *Bṛhadhyogatarāṅgiṇī*. This need not imply that these sources were not employed in compiling the *Bṛhadhyogatarāṅgiṇī* because both texts contain a large number of unidentified verses. Part of these can be identified by comparing the *Yogatarāṅgiṇī* with the *Bṛhadhyogatarāṅgiṇī*.⁵⁰⁸ This enables us to determine at least two more sources of the *Yogatarāṅgiṇī*: *Bhadrāśaunaka* and *Gorakṣamata*.⁵⁰⁹ A comparison of both works also shows that there are very numerous variants in the readings of essentially the same verses.

The *Yogatarāṅgiṇī* is one of the sources of the *Bhṛṣajasaṃhitā*, Dattarāma's *Bṛhadrasarajasundara*, Devasiṃha Viṭthal's *Bṛhadāsavārīṣaṣaṃgraha*, Mādhava's *Āyurvedaprakāśa*, Prāṭhapaśiṃha's *Amṛtasāgara*, Raṅgajyotiṛvid's *Vicārasudhākara*, Viśvanātha Dvivedī's *Rasendrasambhava*, and the *Rasoddhātatantra*.

The *Yogatarāṅgiṇī* is quoted in Hanumatprasāda's commentary on the *Siddhabhāṣajayamañjūṣā*, Khare's commentary on the *Rasaratnasamuccaya*, Nirañjanaprasāda Gupta's *Pāradasaṃhitā*, the *Rasatattvavivecana*, Śāma's *Sārasaṃgrahatarāṅgiṇī*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, Vidyāpati's *Vaidyarahasya*, and the *Yogaratanākara*. The *Laghuyogatarāṅgiṇī* (i.e., the *Yogatarāṅgiṇī*) is quoted in Mādhava's *Āyurvedaprakāśa* and the *Rasāyanasaṃgraha*.⁵¹⁰

Chapter three (3.25–27) informs us of the discount on fresh or prepared drugs available to vaidyas; this discount, called dhānvantarabhāga or rudrabhāga, was one-eleventh with respect to fresh drugs and 12.5 to 50 percent of the cost of prepared medicines.⁵¹¹ Homage has to be paid to Vighneśa, Kṣetrapāla and Baṭuka before starting the process of snehapāka (4.21–22).⁵¹² A form of sudation called vṛhijanyasveda has been added to the usual series (5.29).⁵¹³ Among the ways of examining a patient the unusual process of vastraparīkṣā is described (13.1–4).⁵¹⁴ The examination of one's shadow (chāyāpuruṣa) is described among the forms of parīkṣā (14.1–11);⁵¹⁵ it provides information on the chances of recovery or the time span left to a patient until his death; the verses on this subject are from the *Śivāgama*. Syphilis, although not separately described, is referred to at least once as phiraṅga (17.69). The preparation of rasakarpūra, often used as a specific against syphilis, is described (17.62–69), quoted from the *Bauddhasarvasva*.⁵¹⁶ The symptoms of one series of thirteen saṃnipāta fevers⁵¹⁷ are

described, followed by abhinyāsa fever (19.36–72 and 78–79); the members of the series are viddha,⁵¹⁸ bhalla,⁵¹⁹ śarkara, visphuraka,⁵²⁰ śighrakārin,⁵²¹ phamphaṇaka,⁵²² karṇamūla,⁵²³ karkaṭaka,⁵²⁴ saṃmohaka,⁵²⁵ saṃgrāma,⁵²⁶ krakaca,⁵²⁷ pākala, and kūṭapākala;⁵²⁸ the therapy of these fevers is not dealt with. A particular rasayoga (aśvaka-ñcukīrasa: 20.36–37) is said to derive from a yogin who came from a western country (pāścātyadeśāgatayogin).⁵²⁹ The way of preparing a mineral acid or mixture of mineral acids (śaṅkhadrāva) is described (24.29–34).⁵³⁰ The disease called bhasmaka is mentioned (24.2.1–2).⁵³¹ Parīṇāmasūla is said to be of eight types in a verse quoted from the *Alaṃkāra* (44.1).⁵³² The disease called kuraṇḍa is mentioned (55.2).⁵³³ The disease called bradhma is dealt with in a separate chapter (56).⁵³⁴ The disease called snāyuka (67.1–4)⁵³⁵ is described in the same chapter as masūrīkā. The verses on māsurīkā mention in passing the type called kodravaka (67.9),⁵³⁶ as well as the appeasement of the goddesses Śītālā and Caṇḍī as therapeutic measures in cases of masūrīkā (67.10–11).⁵³⁷ Anticonceptive (75.8–15) and abortifacient measures (75.16–19) are described.⁵³⁸ The bālagrahas, taking possession of a child on the first, second, etc., day, in the first, second, etc., month or year of its life, are called Nandā, Sunandā, Pūtanā, Maṇḍitikā,⁵³⁹ Pūtanā, Śakunī, Śuṣkarevaṇī, Āryākā, Sūtīkā, Nirṛī,⁵⁴⁰ Pilipīṇḍikā,⁵⁴¹ and Kāmukā (77.1–12).⁵⁴² Noteworthy medicinal substances repeatedly prescribed by Trimalla are ahiphena (opium), bhaṅgā (Cannabis) and mastagī; other interesting names of drugs are candraśūra (62.30), kulīñjana (62.28), and pāṭra (64.6).⁵⁴³

(2) The *Bṛhadhyogatarāṅgiṇī*⁵⁴⁴ is much longer than the *Yogatarāṅgiṇī* and consists of about 10,000 verses, arranged in 148 chapters (taraṅga). It is in many respects an expanded version of the *Yogatarāṅgiṇī*, but it not only adds to the text of the latter. Many instances can be found of sequences of verses replaced by material from a different source,⁵⁴⁵ and, less frequently, verses incorporated in the *Yogatarāṅgiṇī* are omitted altogether from the *Bṛhadhyogatarāṅgiṇī*.⁵⁴⁶ Stanzas occurring in both texts often show variant readings. The *Bṛhadhyogatarāṅgiṇī* contains some prose⁵⁴⁷ and a number of glosses.⁵⁴⁸

The verses on therapy are arranged in the same way as in the *Yogatarāṅgiṇī*: āyurvedic prescriptions precede the rasayogas. Religious therapy and magic, such as mantras and yantras, are especially represented in the chapters on masūrīkā (126), mūḍhagarbha (140), bālaroga (144), and viṣa (145).

The *Bṛhadhyogatarāṅgiṇī* differs from the *Yogatarāṅgiṇī* in many respects. A chapter on embryology and anatomy is added (2). The chapter on weights and measures gives at the end a verse from Matimukura. Chapter four, identical with chapter three of the *Yogatarāṅgiṇī*, refers to a number of sources. Chapter five, on snehapāna, longer than the corresponding chapter of the *Yogatarāṅgiṇī*, mentions some sources (Śāringadhara, Caraka, *Yogaratanāvalī*, *Vaidyālaṃkāra*, and Matimukura). Chapters six to twelve resemble chapters five to eleven of the *Yogatarāṅgiṇī*, but some are somewhat longer. Chapters thirteen and fourteen are additions, concerned with the royal kitchen. Chapter fifteen, on the regimen during the seasons, differs from the corresponding chapter (81) at the very end of the *Yogatarāṅgiṇī*; the descriptions of the seasons do not tally and their order is dissimilar.⁵⁴⁹ Chapter sixteen, on prepared foods

(siddhāṇṇa),⁵⁵⁰ is an addition again, as well as chapters seventeen on dinacaryā, eighteen on rātrīcaryā, and nineteen on rasa, vīrya, vipāka, and prabhāva. Chapters twenty to thirty-seven form a nighaṇṭu, not found in the *Yogatarāṅgiṇī*; they contain, usually without describing a drug and giving its synonyms,⁵⁵¹ enumerations of the medicinal properties of numerous articles of food and drugs; the subjects of these chapters are: dugdha, dadhi, takra, navaṇṭa, ghṛta, taila, madya, ikṣu, madhu, śālyādi, phala, śāka, māṃsa, haritakyādi, vaṭādi, śuṇṭhyādi, and karpūrādi. Chapters added are thirty-eight on definitions of actions of drugs (pācanādi),⁵⁵² thirty-nine on incompatible articles of food (viruddhāhāra), and forty on eighteen groups of drugs (rāsnādigaṇa). Chapters forty-one to forty-three on rasaśāstra (alchemy) are much more elaborate than the corresponding chapter (17) of the *Yogatarāṅgiṇī*. The seven kaṇṭukas of mercury and the disorders caused by them are described according to the *Bauddhasarvasva*; their names are mṛd, pāṣāṇa, jala, kālī, kāpālikā, śyāmā, and kapālikā (42.13–15ab).⁵⁵³ The twenty saṃskāras of mercury, as mentioned in the *Śivāgama*, are enumerated (42.18): paṭasāraṇa,⁵⁵⁴ saṃmardana, mūrchanā, utthāpana, sveda,⁵⁵⁵ pātana, bodhana, niyamana, dipana, mukhakarāṇa, jāraṇa, saviḍā, māna, garbhadruti, rañjana, vedhana, bahirdruti, sārāṇa, krāmaṇa, and māraṇa. The uparasas listed are (43.1–2): gandhaka, vajra, vaikrānta, sindūra, bola,⁵⁵⁶ gairika, samudraphena, khaṭikādvaya,⁵⁵⁷ śambūka, tārkṣyaḥ, kāsisa, kāntapāṣāṇa, varāṭī, śukti, hīṅgula, kaṅkuṣṭha,⁵⁵⁸ śaṅkha, bhūṇāga, ṭaṅkaṇa,⁵⁵⁹ and śilājātu. Four minor gems are enumerated: muktā, vidrūma, śaṅkha and rājāvarta (43.82). Chapter forty-four on aṣṭajñāna is for its larger part an addition, consisting of quotations from the *Yūpasāgara* and *Rasamañjarī*; it also deals with the prognosis by means of one's shadow (chāyāpuruṣa), in the same words as in chapter fourteen of the *Yogatarāṅgiṇī*. Chapters forty-five to fifty-three are about the various forms of parīkṣā, as chapters twelve to sixteen of the *Yogatarāṅgiṇī* are; the subjects are partly differently and more elaborately described than in the *Yogatarāṅgiṇī*; vastraparīkṣā is omitted, but, on the other hand, varṇa- and svaraparīkṣā have been added. Chapter fifty-four, on some aṣṭas, is an addition. The same applies to chapter fifty-five on the most auspicious times for collecting drugs and about the parts of the day, etc., on which a drug should be given to patients suffering from particular diseases; dosages are also mentioned. Chapter fifty-six, also added, is concerned with the signs indicating an increase or decrease of the doṣas, dhātus, and malas.

Chapters 57–145 are about diseases and their treatment. Chapter 146 describes combinations of articles of food which are regarded as incompatible (viruddhāhāra).⁵⁶⁰ Chapter 147 deals with vājīkaraṇa, and the last chapter, 148, enumerates the main drugs employed in each of the diseases mentioned.

Chapters 57–145 usually begin with reproducing the corresponding chapter of the *Mādhavanidāna*, to which sometimes verses are added,⁵⁶¹ while in rare cases verses found in the *Mādhavanidāna* are replaced by other ones.⁵⁶² The *Bṛhadhyogatarāṅgiṇī* mentions, more often than the *Mādhavanidāna*, the complications (upadrava) of a particular disease;⁵⁶³ the therapy of these complications is sometimes separately described.⁵⁶⁴

When compared with the *Yogatarāṅgiṇī*, many differences strike the eye. The description of two series of thirteen saṃnipāta fevers; the members of the first series

(57.55–67) bear, one fever excepted (vyālākṛti replaces kaṇṇamūla of the *Yogatarāṅgiṇī*), the same names as those found in the *Yogatarāṅgiṇī*, but their order slightly differs; more important, however, is that the descriptions, quoted from the *Pṛyūṣasāgara*, bear no resemblance at all to those occurring in the *Yogatarāṅgiṇī* and are not found in any other text known to me; the treatment of this series of fevers is not dealt with. The second series (55.76–88) consists of saṃdhiga, antaka, rugdāha, cittabhrama, kaṇṇaka, kaṇṭhakubja, śītāṅga, tandrika, pralāpaka, raktaśṭhīvin, bhugnanetra, abhinyāsa, and jihvaka; the descriptions of these fevers are, antaka excepted, identical with those of Śārṅgadhara's *Trisatī*.⁵⁶⁵ Trimalla's description of antaka is not found in any other text; the verses on the treatment of these fevers (59.69–155) are borrowed from Śārṅgadhara's *Trisatī* again.⁵⁶⁶ The addition of a chapter on jvarātisāra (65).⁵⁶⁷ The description of daṇḍālasaka (71.20).⁵⁶⁸ A description of bhaṣmaka (71.24–25) that is different from that of the *Yogatarāṅgiṇī*.⁵⁶⁹ The description of suptavāta under the name of tvakśūnyatā (90.267cd–268).⁵⁷⁰ A separate chapter on ūrustambha (92). A separate chapter on the treatment of ānāha (97). The verse on kuraṇḍa of the *Yogatarāṅgiṇī* (55.2) is absent, but the same disease (kuraṇḍa, korāṇḍa) is referred to in the verses on the therapy of vṛddhi (107.36 and 38). The definition of bradhna (107.13)⁵⁷¹ differs from that found in the *Yogatarāṅgiṇī* (56.1); it is also called vardhma (107.46–47). The description of stanavidradhi (110.28–29).⁵⁷² The description, in prose, of agnidagdhabraṇa (113). The description of a dāruṇa type of upadāṃsa, occurring in both men and women (117.8cd–9). The description of the aetiology, symptoms and treatment of a venereal disease called rativraṇa,⁵⁷³ and of the intoxication brought about by the abuse of mercurial preparations (sūtadoṣa) (118).⁵⁷⁴ A separate chapter on snāyuka (124). The addition of an adhikāra on śītālā to the chapter on masūrīkā (126.78–105); this adhikāra also contains the well-known hymn to Śītālā from the *Kāśīkhaṇḍa* of the *Skandapurāṇa*. The number of chapters on gynaecology and obstetrics (133–143) is much larger than in the *Yogatarāṅgiṇī*. The addition of a chapter on somaroga and mūtrātisāra (135).⁵⁷⁵ The addition of a chapter on strīdveṣa (136), taken from Nāgārjuna's *Yogasāra*.⁵⁷⁶ The addition of a chapter on yonikanda (138). The addition of a chapter on makkalla (141).⁵⁷⁷ The insertion of the pūtanāvidhāna from Rāvaṇa's *Kaumāratānta* in the chapter on children's diseases (144).

Chapters sixteen and twenty to thirty-seven, which form a nighaṇṭu, incorporated in the *Bṛhadhyogatarāṅgiṇī*, are based on the *Madanapālanighaṇṭu*. Trimalla quotes Madanapāla's verses on the properties of medicinal substances and articles of food, mostly omitting to enumerate their synonyms. The order of Madanapāla's chapters has been changed by Trimalla; some substances are absent,⁵⁷⁸ while other ones were added by him.⁵⁷⁹ In rare cases a verse differs completely from the corresponding one in the *Madanapālanighaṇṭu*.⁵⁸⁰ Worthy of note is Trimalla's distinction of ādhakī (30.30) and tuvarī (30.44ab),⁵⁸¹ garjara (32.69) and grājana (32.80cd–81ab).⁵⁸² Some names do not agree with those occurring in the *Madanapālanighaṇṭu*.⁵⁸³ Vernacular names are also mentioned.⁵⁸⁴ Chapter sixteen, which belongs to the nighaṇṭu of the *Bṛhadhyogatarāṅgiṇī*, has, at least for its major part, not been borrowed from the *Madanapālanighaṇṭu*, although it shares a number of verses with it.⁵⁸⁵

A few medicinal substances, prescribed in the *Bṛhadhyogatarāṅgiṇī*, are absent from

the nighaṇṭu chapters, e.g., ākalla (118.21), ākārakarabha (117.32), dvīpoṭtharāśnā (91.86),⁵⁸⁶ postaka (118.7), śāṅkhopala (117.37), and śivaliṅgi (139.18). Chapter forty-one does not mention zinc (yaśada) among the metals.

The *Bṛhadyogatarāṅgiṇī* refers to and quotes from the following authorities and sources: Āgama (42.228–233),⁵⁸⁷ *Ārogyadarpaṇa* (59.35–36 and 219–220), *Āśvineya* (84.31–41),⁵⁸⁸ *Bauddhasarvasva* (42.13–15ab; 79.33–36; 90.232–234), *Bhadraśaunaka* (4.21ef–26ab),⁵⁸⁹ *Bhāradvāja* (139.28–37),⁵⁹⁰ *Bhāvaprakāśa* (131.183–185),⁵⁹¹ *Bheda* (32.30ab),⁵⁹² *Bhoja* (18.30–31ab and 33ab; 116.5–11),⁵⁹³ *Bṛhadātreyā* (9.34cd–44),⁵⁹⁴ *Caraka* (5.26–36ab; 58.16; 76.76; 101.33–39ab; 106.74–75; 129.37–38), *Cikitsā* (69.29–31), (Tisāṭa's) *Cikitsākalikā* (59.39; 76.55–58), *Gorakṣamata* (4.11cd–18ab and 19cd–21cd; 42.12), *Gorakṣanātha* (81.28–30), *Govindapādāḥ* (42.126),⁵⁹⁵ *Hārīta* (1.11; 13.36), *Jaijjāta* (106.74–75),⁵⁹⁶ *Kṛṣṇātreyā* (3.31–34ab; 9.66cd–27ab), *Mādhava* (120.284–286),⁵⁹⁷ *Manthānabhairava* (71.39–48), *Matimukura* (3.33cd–34ab; 5.39cd–40ab), *Nāgārjuna*,⁵⁹⁸ *Nalapāka* (16.5–7ab),⁵⁹⁹ *Nārāyaṇīya* (79.17–22), *Nighaṇṭu* (gloss ad 108.46),⁶⁰⁰ *Nityanātha* (147.236–240),⁶⁰¹ *Pīyūṣasāgara*⁶⁰² (41.92ab),⁶⁰³ *Pradīpa* (79.24),⁶⁰⁴ *Prayogapārījāta* (9.62–65),⁶⁰⁵ *Rājāmārtaṇḍa* (73.19–32; 75.37; 131.136 and 139; 147.452–454), *Rasacintāmaṇi* (42.180–184),⁶⁰⁶ *Rasamañjarī* (41.37cd–38ab and 42–49; 44.25–29 and 30–40; 48.4–7), *Rasāmṛta* (122.51cd–54),⁶⁰⁷ *Rasarājalakṣmī* (42.245–250),⁶⁰⁸ *Rasaratnākara* (118.15–22 or 18cd–22),⁶⁰⁹ *Rasaratnapradīpa*⁶¹⁰ (8.47–48; 59.320–321 and 326–328; 74.58–60; 76.128–130; 79.32; 88.87cdef; 94.77–78), *Rasārṇava* (41.96–99ab; 42.3–8ab; 71.121–126; 76.117–121), *Rasasindhu* (60.41–49), *Rasendracintāmaṇi* (42.17, 64–66, 71cd–74ab, 85–89; 59.31–34ab; 60.1–11; 71.149–152 and 157–160ab; 75.104–106; 77.42–47ab), *Rasendrasaṃhitā* (71.153–156), *Ratnapradīpa* (73.36–40),⁶¹¹ *Rāvana's Kaumāratantra* (144.81–104),⁶¹² *Rugviniścaya* (75.2–10ab), *Sārasaṃgraha* (5.19–25(?); 8.46; 59.67 and 305–306; 76.122–124; 147.211–215), *Śāringadhara* (3.27cd–30; 4.1–11ab; 5.1–18; 8.45; 12.21cd–24; 47.30–41; 49.4–8; 59.19 and 28–29ab; 77.47cd–52ab; 91.73–79), *Siddhalakṣmīśvaratantra* (42.91–99),⁶¹³ *Siddhamata* (42.10–11ab),⁶¹⁴ *Śivāgama* (42.15cd–16, 18, 68–71ab, and 251–255), *Sudhāsāgara* (50.3–5ab),⁶¹⁵ *Suśruta* (2.139cd–192ab; 13.36; 56.69cd–75; 58.17; 76.27–37; 79.23; 129.37–38), *Tisāṭa* (1.49–60b; 145.80–85),⁶¹⁶ *Vāgbhaṭa* (1.12–48; 2.197cd–200 and 202–203; 44.1–6; 56.10–14; 58.58–60; 90; 128.105–108ab), *Vaidyālaṃkāra* (4.18cd–19ab and 26cd–32; 5.38cd–39ab), *Vaidyavilāsa* (107.28cd–33),⁶¹⁷ *Vasantarāja* (79.37–38; 147.419–425), *Vaśiṣṭhasaṃhitā* (2.50cd),⁶¹⁸ *Videha* (13.28cd–32ab; 58.71; 131.171–174ab),⁶¹⁹ *Vṛddhasuśruta* (20.53–55),⁶²⁰ *Vṛddhavāgbhaṭa* (58.54 and 69–70),⁶²¹ *Vṛnda* (59.17, 21–23ab, 38, 48–52, 201–204, 334–337; 79.25–31; 88.72; 95.50–54ab; 147.216–222), *Yogaratanvālī* (5.36cd–38ab; 6.1–30; 59.62–63; 78.88cd–90ab; 122.44–45 and 46–51ab), *Yogasāra* (136.1; 147.167–170), *Yogaśata* (59.16 and 40–41; 73.17–18; 103.74–76), and *Yūpasāgara* (44.7–24).⁶²² To this list have to be added, according to P.V. Sharma,⁶²⁴ the *Bheṣajatantra* and *Gaurimata*.

The *Bṛhadyogatarāṅgiṇī* is quoted in the *Āyurvedīya Khanijavijñāna*, *Bheṣajasamhitā*, *Bṛhannighaṇṭuratanākara*, Khare's commentary on the *Rasaratnasamuccaya*, the *Pāradasaṃhitā*, *Rasoddhātatantra*, *Rasayogasāgara* and *Rasatattvavivecana*. It is one of the sources of Hārīśaraṇānanda's *Kūpīpakvarasanirmāṇavijñāna*.

(3) The *Vaidyacandrodaya*⁶²⁵ is a treatise on nidāna⁶²⁶ in 340 skillfully composed stanzas, arranged in eighty-two chapters (avaloka). The verses are in sragdharā metre, those of the final chapter excepted, which are ślokas.

The first chapter is of an introductory character. Chapters two to seventeen are concerned with the messenger who is sent to the physician (dūta; 2), omīna (śakuna; 3), embryology and anatomy (śārīra; 4), signs foreboding death (kālabodha; 5), the examination of the urine (mūtraparīkṣā) by means of a drop of oil (tailabindu; 6), the examination of the stools (malaparīkṣā; 7), the examination of the eyes (dṛṣṭiparīkṣā; 8), the examination of the pulse (nāḍiparīkṣā; 9), the characteristics of incurability (asādhya; 10), the examination of the complexion (varṇa) and voice (svara) of a patient (11), the characteristics of diseases suitable to palliative treatment (yāpya) and of curable (sādhya) diseases (12), the causes of excitement of vāta, pitta, kapha, and all three doṣas simultaneously (13–16), and nidānapañcaka, i.e., hetu, prāgrūpa, rūpa, upaśaya and samprāpti (17).

Chapters eighteen to eighty-one deal with the nidāna of the various diseases. Trimalla states⁶²⁷ that he adopted the order of the diseases established by Mādhava. In spite of this statement the arrangement of the *Vaidyacandrodaya* shows some minor divergences: the addition of chapters on pittaroga (41) and kapharoga (42) after the chapter on vātaroga; the addition of a chapter on piḍikā (43); a different order of the chapters on śopha, ślipada and kuraṇḍa⁶²⁸ (57), vṛṇaśoṭha (58), sadyovraṇa, bhagna and nāḍivraṇa (59), bhagandara (60), galagaṇḍa, gaṇḍamālā, apaci, granthi and arbuda (61), and vidradhi (62); the omission of a chapter on visphoṭa, and the omission of chapters on stanaroga and stanyaduṣṭi. Other differences are: the addition of bhasmaka in the chapter on agniroga (22); the addition of daṇḍājīrṇa (verse 110) to the types of ajīrṇa mentioned by Mādhava; the comparison of the eight major diseases with a king, surrounded by his courtiers (verse 131); the enumeration of the eighty vāta diseases.

The last chapter consists of an enumeration of all the diseases dealt with in the treatise.

(4) The *Śataśloki*⁶²⁹ is a work on the medicinal properties and uses of articles of food and some other substances of daily use. Its style is that of a medical kāvya; its 101 verses are mostly composed in long metres, while the śloka is completely absent.⁶³⁰ Various alaṃkāras are employed by Trimalla.⁶³¹

The substances dealt with are divided into fifteen groups (varga):⁶³² (1) water (jala; 3–10),⁶³³ (2) milk and dairy produce (dugdha; 11–22),⁶³⁴ (3) grain and pulse (dhānya; 22–26), (4) meat (māṃsa; 27–38), (5) vegetables (śāka; 39–49), (6) the sugarcane and its products (ikṣu; 50–51), (7) honey (madhu; 52), (8) oils (taila; 53–55), (9) fruits (phala; 56–67), (10) spices and condiments (śuṇṭhyādi; 68–73), (11) prepared dishes (kṛtānna; 74–89), (12) fermented liquids (madya; 91), (13) abhyaṅgādi (substances used for massage and bathing; 92), (14) tāmbūlādi (93–95), (15) inorganic substances (suvarṇādi; 96–100).⁶³⁵

Some interesting prepared foods (kṛtānna) described by Trimalla are jalavalaya (85)⁶³⁶ (i.e., jalebī) and puṣpavaṭī (81).⁶³⁷

Commentaries on the *Śataśloki* were written by Kṛṣṇadattamiśra, Balabhadra,⁶³⁸ Rūpacandra,⁶³⁹ and Gopāla.⁶⁴⁰ A *Trimallaṭīkā*, probably a commentary on the *Śataśloki*, is quoted in the *Tāmbūlamajjarī*.

Interesting features of Kṛṣṇadatta's commentary, called *Dravyadīpikā*, are: godhūma is of three types: mahāgodhūma, madhūli and nandīmukhī; mudga is of two types: kṣetramudga and vanamudga; masūra is of two types: a black type called masūra, and a pale type called maṅgalya; kalāya is of two types: tripuṭa and vartula; śaṇa is of two types: śaṇa and paṭaśaṇa; kodrava is of two types: kodrava and vanakodrava, also called uddālaka⁶⁴¹ or yāvanāla; śyāmāka is of three types: toya-, uṣṭra-, and hastiśyāmāka.⁶⁴²

Kṛṣṇadatta sometimes tries to reconcile conflicting statements found in earlier treatises by tortuous arguments, while in other cases he decides in favour of one of the early authorities.⁶⁴³

Kṛṣṇadatta gives ample proof that he was well versed in grammar.

Authorities and works quoted or referred to by him are: *Abhidhānacūḍāmaṇi*, *Agniśeśaśāstra*, Amara, Aruṇadatta, Bhāvamiśra, Brahmadeva, Cakrapāṇi, Caraka, Dalhaṇa, *Dhanvantarinighaṇṭu*, Gayadāsa, Hārīta, Hemādri, Jaijāta, Kaiyadeva, Khāranādi, Locana,⁶⁴⁴ Mādhavakāra ('s *Dravyaguṇa*), Medinī, *Mitākṣarā*, Muni, *Nairukta*, *Nighaṇṭu*, *Śabdārṇava*, *Samgraha*, *Samgrahabodha*,⁶⁴⁵ *Sārasaṃgraha*, *Siddhamantraprakāśa*, Sīma, Suśruta, *Trikaṇḍaśeṣa*, *Triśatīṭīkā*, Trivikrama, Vāgbhaṭa, *Vāgbhaṭīyasaṃgrahabodha*,⁶⁴⁶ Vāpyacandra, and Vyāḍi.⁶⁴⁷

Kṛṣṇadattamiśra was the son of Śivadattamiśra, the author of the *Śivakośa*. He was born in Kāśī, but settled probably in the Pañjāb.⁶⁴⁸ His commentary may have been composed around A.D. 1700.

The author

Trimalla(bhaṭṭa),⁶⁴⁹ a brāhmaṇa,⁶⁵⁰ was the eldest of the three sons of Vallabha,⁶⁵¹ a specialist in Vedic studies, and a grandson of Siṅgaṇṇabhaṭṭa,⁶⁵² who lived in Kāśī. The latter was a famous man, honoured by kings, a devotee of Śiva, of a family of Āpastambas surnamed Āravella,⁶⁵³ and coming originally from Koḍapalli⁶⁵⁴ in the Telugu country.⁶⁵⁵

Trimalla wrote his works in Tripurāntakanagara.⁶⁵⁶ He sometimes refers to his guru, without mentioning his name.⁶⁵⁷ Trimalla's son Śaṃkarabhaṭṭa was the author of the *Rasapradīpa*.⁶⁵⁸

Date

Trimalla's chronological position has been a matter of controversy. Some authors assign him to the period between A.D. 1382/83 and 1498/99.⁶⁵⁹ This dating, proposed for the first time by H.D. Velankar,⁶⁶⁰ is based on the quotations from the *Virasimphāvaloka*⁶⁶¹ in the *Yogataraṅgiṇī* and the date of completion of a MS of Trimalla's *Śataśloki*, described by Rājendralāl Mitra.⁶⁶² Atrideva⁶⁶³ was of the opinion that Trimalla lived in the period between the *Śārṅgadharasaṃhitā* and Bhāvamiśra's *Bhāvaprakāśa*, because the former is quoted, and because the term phiraṅgaroga, appearing for the first time in the *Bhāvaprakāśa*, is not yet employed by him.⁶⁶⁴ On the latter point Atrideva

is wrong, which invalidates his conclusion that Trimalla composed his works in the beginning of the sixteenth century. B. Tripāṭhī⁶⁶⁵ has advanced the view that Trimalla is somewhat later than Lolimbarāja, who is quoted by him. Bhagvat Sinh Jee's date of composition⁶⁶⁶ of the *Yogataraṅgiṇī*, A.D. 1751, is much too late since the work is quoted in Vidyāpati's *Vaidyarahasya*.

P.V. Sharma has brought forward that Trimalla must have flourished in the middle of the seventeenth century,⁶⁶⁷ because Bhāvamiśra and Lolimbarāja are quoted by him, and the *Yogarātnākara*, dating in his opinion from the last part of the seventeenth century, quotes the *Yogataraṅgiṇī*.

There is much in favour of this view, which implies that the dating of the Calcutta MS of the *Śataśloki* must be regarded as untrustworthy.

P. Hymavathi is convinced that Trimalla belonged to the second half of the sixteenth century; his arguments are that Trimalla quotes the *Bhāvaprakāśa*, while the *Yogarātnākara* is acquainted with Trimalla's works.⁶⁶⁸ As a corroborative piece of evidence, he refers to a grant of land to Trimalla's brother Rāma, made in A.D. 1580.⁶⁶⁹

Some early MSS of works by Trimalla were completed in 1646/47,⁶⁷⁰ 1658,⁶⁷¹ 1663/64,⁶⁷² and 1668/69.⁶⁷³ The lower limit of the period of Trimalla's literary activity, provided by these dates, is confirmed by quotations from Trimalla and his *Yogataraṅgiṇī* in Vidyāpati's *Vaidyarahasya*, dating from A.D. 1697/98.⁶⁷⁴ The upper limit must be about A.D. 1600, since Bhāvamiśra and Lolimbarāja are quoted by Trimalla. It can therefore be concluded that Trimalla flourished in the first half of the seventeenth century.

As pointed out by S.L. Katre,⁶⁷⁵ the edited text of the *Bṛhadyogataraṅgiṇī* probably contains some material added to its original version, because Raghunātha's *Vaidyavilāsa*, composed towards the end of the seventeenth century, is quoted in it.

Vaṃśīdhara

Vaṃśīdhara,⁶⁷⁶ father of Vidyāpati,⁶⁷⁷ who composed the *Vaidyarahasya*, wrote the *Vaidyakutūhala*⁶⁷⁸ and *Vaidyamanotsava*.⁶⁷⁹ Since Vidyāpati composed his work towards the close of the seventeenth century, Vaṃśīdhara can be assigned to the third quarter of that century.

Vidyāpati

Vidyāpati was the author of the *Cikitsāñjana* and a therapeutic treatise with the title *Vaidyarahasya*.

The *Cikitsāñjana*⁶⁸⁰

The treatise consists of a collection of prescriptions and comprises 267 verses.⁶⁸¹ It opens with a maṅgala addressed to Arjuna, followed by two introductory verses. The author states in the second introductory verse that his work contains prescriptions from both prākṛta⁶⁸² and ancient physicians, as well as some tested by himself. The prescriptions are preceded by verses on the examination of the pulse (7–16) and urine (17–18),

on incurable disorders (19), and on the alleviation of excited doṣas (20–23).

The remaining part of the work deals with the treatment of a number of diseases which are inconveniently arranged, although Vidyāpati follows broadly Mādhava's order in his other treatise, the *Vaidyarahasya*. Some disorders are not dealt with at all, for example raktapitta, vātarakta, upadaṁṣa, śūkadoṣa, visarpa, and viṣa. Also absent are somaroga, śītalā and phiraṅga, which are mentioned in the *Vaidyarahasya*; snāyuka, however, is present (182).

The prescriptions are mainly of the classical types, with a preference for those called kvātha, cūrṇa and lepa; some rasayogas are prescribed for the treatment of fevers.

The materia medica presents almost no particularities.

The last verse refers to the author's indebtedness to Nayanasukha's *Manomahotsava*.⁶⁸³

Vidyāpati included in his treatise a prescription against lūtā (167).⁶⁸⁴ A magical square (yantra), called ṣaṭtriṁśaka, is mentioned (228), which, drawn on a piece of birch bark and tied to the head, relieves headaches.⁶⁸⁵ The verses on women's diseases (233–251) are for the greater part devoted to subjects such as promoting fertility, preventing abortion, tightening the vagina, and increasing the firmness of the breasts, but some diseases, for example fluor albus and mastitis are also dealt with. The verses on disorders of the male (puṁstvaroga; 252–266) contain measures to increase the size of the male member, promote potency, delay ejaculation, and remove a disagreeable smell. One of the prescriptions for enlarging the penis (252) says that particular pills should be soaked in the patient's own urine before daubing his penis with the substance.

Noteworthy medicinal substances mentioned are kuhelā (245) and mlecchajavānikā (259).⁶⁸⁶

*The Vaidyarahasya*⁶⁸⁷

The treatise consists of about 1,900 verses, arranged in more than seventy chapters. The order of the diseases is broadly the same as in the *Mādhavanidāna*, apart from a number of additions: jvarātisāra, raktātisāra, plīhan, yakṛdroga, kārśya, agnidagdhā, snāyuka, phiraṅgavāta, rasāyana, and vājīkaraṇa; bradhma (aṇḍavṛddhi 18), somaroga (strīroga 18 and 23) and śītalājvara (masūrīkā 9) are also mentioned without a separate chapter being devoted to these disorders. Some contraceptive and abortifacient formulae are found in the chapter on disorders during pregnancy (garbhavācīkīṭsā 31–35). Prodromes, symptoms, etc., are rarely enumerated; exceptions are e.g., aupatyakajvara (jvara 145–146), āma- and pākvatisāra (atisāra 4–5). Usually, mention is made of what is wholesome (pathya) and unwholesome (apathya) in a particular disease.

Vidyāpati's therapeutics, which he calls saṁpradāyacīkīṭsita (jvara 230), is of a mixed type, which employs both āyurvedic prescriptions and rasayogas; the latter are not dealt with separately but they occur scattered among the former. The āyurvedic preparations are for the greater part of the traditional types (kvātha, cūrṇa, ghṛta, taila, etc.), but a number of pākas is also described.⁶⁸⁸ Religious and magical elements are infrequent.⁶⁸⁹ Opium, Cannabis, akāraṅkarabha, jayapāla, and māñjūphala are repeatedly

prescribed.

Sources mentioned are: *Bhāvaprakāśa* (kuṣṭha 8 and 21; gaṇḍamālā 17), Caraka (vātavyādhi 91), Gopāla⁶⁹⁰ (phiraṅga 10), Lolimbarāja⁶⁹¹ (agnimāndya 19), Śārngadhara (vātavyādhi 91), Trimalla (aṇḍavṛddhi 20), and *Yogatarāṅgiṇī* (ślīpada 5; gaṇḍamālā 18).

Vidyāpati's *Vaidyarahasya* is quoted in the *Bṛhadrasarājasundara* and *Rasayogasāgara*. A *Vaidyarahasya* was one of the major sources of the *Amṛtasāgara*.

Interesting names of disorders are: aupatyakajvara (jvara 145–146),⁶⁹² dohadodbhūtanirṇāmikā (bālaroga 24), durjaladoṣaja jvara (jvara 187cd–188ab), janmaśūla (śūla 16), jaratpitta (śūla 36), kūlaka (vātavyādhi 90), nāsābhaṅga (phiraṅga 38), nirṇāmā (bāhyā and ābhyantaragā; bālaroga 24), nirṇāmikā (bālaroga 22), śītalājanita puṣpa (netraroga 68), śūnyatā (kuṣṭha 48), vṛṇagrānṭhi (i.e., keloid; agnidagdhā 8), and vārāhadāśanāhvaya (kṣudraroga 16).⁶⁹³

Noteworthy names of vegetable substances are: alābukhārā (jvara 210), the gum of the babbūla tree (prameha 17), candrasūra (hikkā 7; vātavyādhi 52), dārucīnī (prameha 12), gaṇḍagopālikā (gaṇḍamālā 5), hauhavera (strīroga 20), kahelī (strīroga 19), kuhū (prameha 23), māī (garbhavāṭī 41), mihandikā (vṛṇaśoṭha 40), pikākhyā (garbhavāṭī 43),⁶⁹⁴ revaccīnī (prameha 19), śikharī (kuṣṭha 52),⁶⁹⁵ and śvetasnuhī (agnimāndya 49).

Other medicinal substances of interest are the flesh of an animal called cikhurī (aṇḍavṛddhi 20),⁶⁹⁶ gurjaradeśajātayavakṣāra (bālaroga 22), gajavelī (a kind of iron; netraroga 55), mleṣakṣāra (bhagandara 11), murādāśāṅkha (phiraṅga 5; kṣudraroga 7; śīroroga 41), mūrḍaśāṅkhaka (vṛṇaśoṭha 38), nṛmadhusamuttha (bhagna 9), sābuna (śīroroga 40),⁶⁹⁷ and soraka (phiraṅga 5).

Some of the recipes contain vernacular names of medicinal substances such as āvarā (śīroroga 42; mukharoga 15), chārū (śīroroga 41), kacclākha (mukharoga 15), kāviyāsindūra (śīroroga 40), khaira (śīroroga 42), līlavārī (śīroroga 42), nīlāthothā (śīroroga 42; mukharoga 15), and phīṭkarī (mukharoga 15).

The author

Upādhyāya⁶⁹⁸ or Mīśra⁶⁹⁹ Vidyāpati⁷⁰⁰ was the son of Vamśīdhara, who wrote the *Vaidyakutūhala* and *Vaidyamanotsava*. He was a brāhmaṇa hailing from Mithilā,⁷⁰¹ who adorned the court of Śivasīmha and other kings.⁷⁰² The name of his teacher may have been Candrabhānu Mahādeva.⁷⁰³ Vidyāpati was a devotee of Arjuna.⁷⁰⁴

Date

The *Vaidyarahasya* was written in A.D. 1697/98.⁷⁰⁵ The date of composition of the *Cīkīṭsāñjana* is unknown, but it may be earlier than the *Vaidyarahasya*.

Vinayameruṅaṇi

Vinayameruṅaṇi, a Jain monk, pupil of Hemadharmā of the Kharataragaccha, compiled a collection of recipes called *Vidvanmukhamāṇḍanasārasaṁgraha*.⁷⁰⁶

One of his pupils, Mānakavi or Mānamuni, wrote two medical treatises in Rājasthānī, called respectively *Kavivinoda* and *Kavipramoda*. Vinayameru lived in the last quarter of the seventeenth century.⁷⁰⁷

Vireśvara

Vireśvara, son of Devīdāsa, grandson of Dvivedaraghuvaṃśa, pupil of Vihārīlāmiśra (a gauḍa, who resided in Argalāpura), wrote the *Rogārogavāda*⁷⁰⁸ in Iṣṭakāpatha in A.D. 1668/69.

It is an interesting work of a dialectical nature, which enters into a discussion of the views of ancient scholars of medicine. Vagbhata's *Aṣṭāṅgahṛdayasaṃhitā* was Vireśvara's chief authority and is often quoted together with two commentators on that treatise, Aruṇadatta and Hemādri. Other sources quoted are Caraka, Mādhava and Suśruta.⁷⁰⁹

Yaśaḥcandra

Yaśaḥcandra wrote the *Sarvasāra* in 1688/89.⁷¹⁰

Chapter 3

Eighteenth-century authors and works

Ānandavarman

Ānandavarman, author of the *Sārakaumudī*, is assigned to the middle of the eighteenth century.¹

Anaṅga Kavirāja

Anaṅga Kavirāja, who enjoyed the patronage of the Ahom monarch Lakṣmīsiṃha (A.D. 1769–1780), composed a voluminous work called *Vaidyakalpataru*.²

Ananta

Ananta, of Dadhīci family, son of Keśavarāya, composed at the behest of Mahārāja Pratāpasīṃha of Jaypur³ (A.D. 1778–1803) in 1792/93 the *Pratāpakalpadruma*, also called *Anantaprakāśa*, a work in twenty-four chapters.⁴

Sources referred to by Ananta are:⁵ *Ānandamālā*, *Bhāgavata*, *Bhāvaprakāśa*, *Caraka*, *Cikitsāmr̥tasāgara*, *Cikitsāsara*, *Dāmodara*, *Gāruḍīsaṃhitā*,⁶ *Hārīta*, *Hitopadeśa*, *Jvaratimirabhāskara*, *Kutūhala*, *Lakṣmaṇotsava*, *Ratnabhūṣaṇa*,⁷ *Ṛtucaryā*, *Siddhānta-sīromaṇi*,⁸ *Śīrājagrantha*(?),⁹ *Suśruta*, *Ṭoḍarānanda*, *Vāgbhāta*, *Vaidyakaśāroddhāra*, *Vaidyapaddhati*, *Vaidyarahasya*, *Vaidyaratna*, *Vaidyasaṃjīvanī*,¹⁰ *Vaidyasāra*, *Vaidyavinoda*, *Vidvajjanarāñjana*,¹¹ and *Vṛnda*.¹²

Bālarāma

Bālarāma, author of the *Ātaṅkatimirabhāskara*, is assigned to the eighteenth century.¹³

Raghunāthajī Indrajī, the author of the *Nighaṇṭusamgraha*, borrowed the description of tea from the *Ātaṅkatimirabhāskara*.¹⁴

Basava

Basava was the author of the *Śivatattvaratnākara*.

The *Śivatattvaratnākara*¹⁵ is a large encyclopaedia,¹⁶ which contains the following subjects of medical interest:¹⁷ āyurveda as an upaveda of the *R̥gveda* (I.2.15);¹⁸ a definition of the term āyurveda (I.2.16cd–17ab); measures of length (II.1.6cd–11);¹⁹ diseases caused by sins committed in previous lives (II.3); grahas (III.1.28–47);²⁰

kārajñāna and aśṭas (V.1.62–88ab); dreams (V.3);²¹ omina (śakuna; V.8);²² definitions of a good cook (sūda), bhiṣaj, and vaidya (V.15.91cd–99ab);²³ vṛkṣāyurveda (VI.10 and 11);²⁴ kāmāśāstra (VI.12 and 13.1–127);²⁵ inunction (abhyāṅga) and anointing (vilepana) of a king's body (VI.14.22–88);²⁶ the art of perfumery (gandhayukti; VI.15);²⁷ precious stones (VI.17);²⁸ prepared foods (VI.18 and 19);²⁹ medicine (VI.21);³⁰ properties of articles of food and some other substances, together with related subjects (VI.22.1–38ab); the formulae of eight important rasayogas (VI.22.47–98); alchemy and iatrochemistry (VI.22.99–130ab; VI.23, 24 and 25); toxicology (VI.26–27);³¹ indrajāla (VII.2: quoted from the *Haremekhalikātāntra*);³² characteristics of the female (VII.9) and the male (VII.10) body and their meaning;³³ elephant-lore (VII.11);³⁴ aśvaśāstra and some other subjects related to veterinary science (VII.12 and 13).³⁵

Special features

Interesting subjects are: some names of vegetables: śakāṭa, mahābāṣpa, goṇī, and gandhalakṣmī (VI.18.121); some prepared dishes: doṣaka (VI.19.16cd–17ab), iḍḍalikā (VI.19.17cd–21ab), and varṣelaka (VI.19.27cd–33ab); a description of the descent of āyurveda to the human world (VI.21.4–5);³⁶ definitions of the eight limbs of āyurveda: kāyatantra, bālatantra, grahatantra, śālākyatantra, śalyatantra, agadatantra, rasāyanatantra, and vṛṣatantra (VI.21.8–14); the three doṣas (VI.21.23–39, 46–47ab, 54, 97–108ab);³⁷ the digestive fire (VI.21.25cd–26ab, 40–41);³⁸ the amount of time required for the digestion of various substances (VI.21.42–45);³⁹ the six tastes (VI.21.47cd–53);⁴⁰ the eightfold examination of a patient (VI.21.55); the examination of the pulse (VI.21.56–96);⁴¹ fevers (VI.21.110cd–137ab);⁴² groups of drugs (VI.21.137cd–178);⁴³ types of country (deśa) and soil (bhūmi) (VI.21.186cd–197ab);⁴⁴ the definition of a rasavaidya (VI.23.56–57); lists of plants employed in the various processes (saṃskāra) to which mercury is subjected (VI.24.2–33); the eighteen saṃskāras of mercury (VI.24.50–182ab);⁴⁵ descriptions of the human constitutions (sāra and prakṛti) (VII.10.159–164 and 170–173).⁴⁶

The chapter on perfumery (gandhayukti; VI.15) mentions five basic processes (saṃskāra): mardana, svedana, lepana, dhūpana, and saṃvāsana (15.6cd–9).

The chapter on precious and semi-precious stones (VI.17) describes five mahāratnas: diamond (vajra), pearl (muktāphala), ruby (māṇikyā), sapphire (nīla), and emerald (marakata), and five uparatnas: puṣparāga, vaidūrya, gomeda, sphaṭika, and pravāla.

Some subjects dealt with in the chapters devoted to alchemy (VI.22–25) are: a list of eight mahārasa(yoga)s, called sarveśvara, pūrṇacandrodaya, rājamrgāṅka, mālinīvasanta, vasantakusumākara, trailokyacintāmaṇi, mahābhūpati, and lakṣmīvilāsa (22.47–48); the formulae of these rasas (22.49–98);⁴⁷ the naisargikamalās of mercury: pāṛthiva, āpya, āgneya, ānīla, nābhāsa, gajacarmākhyā, puṇḍarīka, visarpaka, hāridra, raktacarmākhyā, nāraṅga, raktabinduka, asahyāgni, and maṇḍūka (VI.23.34–35); the seven kaṇḍukas: kālīkā, mālinī, kapotī, raktikā, (s)alomī, girijā, and piṅgalī (VI.23.36–37ab); the three yaugikamalās: viṣa, nāga, and vaṅga (VI.23.37cd); the preparation of some sindūras (22.107cd–112); the description of some bhasmans

(22.113–118ab); measures (22.118cd–126ab);⁴⁸ the storage life (vīryāvasthikāla) of various pharmaceutical preparations (22.126cd–128ab); dosages (22.128cd–130); the five avasthās of mercury (23.32–33); the doṣas of mercury (23.34–44); the eight mahārasas: bhūnāga, ghana (= abhraka), vaikrānta, vimalā, tāpya, tutthaka, kharparī, and rājāvarta (23.58);⁴⁹ the eight uparasas: gandha, kaṅkuṣṭha, kāsisa, (manah)śilā, kākṣī, varāṭikā, gairika, and tālaka (23.59cd–60ab);⁵⁰ a series of six sādharma-rasas: girisindūra, podāraśṛṅgi,⁵¹ gaurīśilā (= gaurīpāṣaṇa), añjana, kampilla, and capala (23.60cd–61ab);⁵² a series of four śaktīrasas: hīṅgula, sasyaka, śilājī, and agnījāraka (23.61cd–62ab);⁵³ a series of five uparatnas; sphaṭika is of three types: śūryakānta, candrakānta, tārakānta, to which some add lohakānta as a fourth type (23.63cd–64ab).⁵⁴

The divyauśadhis enumerated are: atasivallī, bhagavallikā, bhūtakeśī, bhūtumbī, bilvinī, brahmāṇī, camarikā, caṇḍālī, devadālikā, gāndharvī, garuḍavallikā, gomārī, goṣṛṅgi, īśvarī, jyotirlatā, kākīnī, karīraka, karīravallārī, kṛṣṇavallārī, kṣatriṇī, kūrṃmalatā, laṣuṇavallārī, locanalatā, mādhamī, mahāmāṣa, mahauśadhi, maṇḍūkī, mūlakandaka, munivallikā, nimbā vallī, padminī, pītavallī, raktalatā, rohiṇī, rudantī, tāmravallikā, tilakanda, trisūlinī, tumbinī, vīravallī, and vyāghrapādī (24.2–7ab).

The very potent (mahābala) vanaśadhis are: alambusā, aparājītā, ardha-candra, candrikā, cintyā,⁵⁵ citrapatṛā, durgandhā, hemapuṣpī, jalahemāgama, jalakumbhī, jalamūlaka, jalapippalī, jālinī, jalotpalā, kākamācī, kapotī, karṇisphoṭī, kṣīrīṇī, māmsī, maṇḍūkī, meghānādī, musalī, nandinī, pāṣāṇī, patākī, rasā,⁵⁶ rohiṇī, samaṅgā, sārivā, śikhā, śikhipādā, śītāgandhinī, sthalaprasārīṇī, śukanāsikā, tulasī, tuṣāmbu, uttamā, vanakūṣmāṇḍavallī, vāyasī, veṇukā, and vṛścikālī (24.7cd–13ab).⁵⁷

The list of niyāmaka plants (24.15–22) reproduces, more or less, *Rasendracūḍāmaṇi* 8.1–8ab; the list of bhasmakara plants (24.23–33) has also been borrowed, with a number of variants, from the *Rasendracūḍāmaṇi* (8.9cd–20).

The eighteen saṃskāras listed (24.50–54) and described (24.55–182ab) are: svedana, mardana, mūrṇchā, utthāna, pātana, rodhana, niyāma, dīpana, anuvāsana, cāraṇa, jāraṇa, garbhadruti, bāhyadruti, rāga, sāraṇa, anusāraṇa, krāmaṇa, and vedha. Two types of mukha are mentioned: divya and āsura (24.112cd–113). Jāraṇa is of two varieties: bāla- and baddhajāraṇā (24.119). Pratisāraṇa, not listed as a distinct saṃskāra, is described (24.161–164). Five types of vedha are distinguished: lepa-, kṣepa-, kunta-, dhūma-, and śabdavedha (24.168–174ab).

The yantras described are: dolā-, adhaḥpātana-, tiryakpātana-, kacchapa-, ūrdhva-pātana-, āntarālikā-, tāpikā-, pratigarbha-, dvipālikā-, puṭa-, vidyādhara-, ḍamaruka-, nābhi-, garta-, ḍenki-, somānala-, and nālikāyantra (25.17cd–59).⁵⁸ Yantras mentioned only are: vaḍavānala-, dhūpa-, kanduka-, khecara-, sthālikā-, tulā-, lavaṇa-, iṣṭikā-, and koṣṭhayantra (25.61–62).⁵⁹ The mūsās are referred to (25.63–68);⁶⁰ the usual types of puṭa are characterized (25.69–82ab).⁶¹

Some sources⁶² mentioned at the end of kallola six are: the Aśvins, Dattila,⁶³ *Dhanvantarimata*, *Gaurīmata*, *Gītāratnākara*,⁶⁴ *Nalamata*,⁶⁵ *Kohalaka*,⁶⁶ *Mayamata*,⁶⁷ *Pra-yogasāra*,⁶⁸ *Rasahṛdaya*, *Rasaratnākara*, *Śārngadhara*, *Utpalaparimala*,⁶⁹ *Viśvakarmamata*,⁷⁰ *Vihagendrasaṃhitā*,⁷¹ and *Yogarātnāvalī*.

Some sources referred to at the end of kallola seven are: *Amṛtānanda*,⁷²

Haramekhālikātantra,⁷³ *Kautukacintāmaṇi*, *Mānasollāsa*, *Merutantra*, *Nakula*,⁷⁴ *Nala*, *Pālakāpya*, *Śālihotra*, *Vāgbhaṭa*, and *Vidyānātha*.⁷⁵

The author

Basava Bhūpāla⁷⁶ (1684–1710)⁷⁷ was the last ruler of the Kelaḍi kingdom, which flourished from A.D. 1499 to 1763 in the area corresponding to the coast of Kaṇṇāṭaka from Goa in the north to Cannanore in the south.⁷⁸ Kelaḍi was also known as Ikkēri, and its rulers, who professed Vīraśaivism,⁷⁹ were great patrons of literature and architecture.⁸⁰

Basava Bhūpāla also wrote the *Subhāṣitasuradrūma* (in Sanskrit),⁸¹ the *Sūktisu-dhākara* (in a mixture of Sanskrit and Kannaḍa), and a commentary (in Sanskrit) on the *Siddhāntaśikhāmaṇi*.⁸²

The genealogy of Basava Bhūpāla's family forms part of the *Śivatattvaratnākara*.⁸³ He was the son of Somaśekhara and Cannāmbikā or Cennāmbikā,⁸⁴ a pupil of Cannavī-rakara, and a patron of Cokkanātha, author of the *Kāntimatiparinaya*.⁸⁵

Date

The *Śivatattvaratnākara* was completed in 1709.⁸⁶

Cainarūpa

Cainarūpa, a Jain author, who probably lived in Bīkāner, wrote in 1778/79 a *Pathyā-pathyastabaka*.⁸⁷

Cakrapāṇidāsa

Cakrapāṇidāsa, son of Parāṅkuśa, completed his *Abhinavacintāmaṇi* in 1799.⁸⁸

Contents

This treatise is arranged in sixty-six chapters (karaṇa). Chapters one to four deal with māna and paribhāṣā, rasādiśuddhi, kalādidvādaśatattva, and nāḍyāditrayodaśatattva. Chapters five to sixty-three are concerned with the treatment of diseases. The last three chapters are about rasāyana, vājīkaraṇa, and vamanādi, along with ṛtucaryā. The arrangement of the diseases generally agrees with the order adopted in the *Mādhavanidāna*. The recipes begin with kvāthas, cūrṇas, etc., followed by rasayogas, and end with tailas and ghṛtas. The treatise is a compilation derived from various sources, but the original texts have been modified.

Special features

Minor deviations from the arrangement of the diseases in the *Mādhavanidāna* are: a separate chapter on kāmālā and halīmaka; separate chapters on śvāsa and hikkā; vra-ṇaśoṭha, śārīravraṇa, sadyovraṇa, bhagna and nāḍīvraṇa are discussed in one chapter, as well as visarpa and visphoṭa; pradara, yonivyāpad, mūḍhagarbha and sūtikāroga are

dealt with collectively in a chapter on strīroga. Special emphasis is laid on astrological and religious aspects of therapy. A new disorder described is amlapittajvara.⁸⁹

Diler Jang

Diler Jang was the author of the *Dinacaryāpaddhati*.⁹⁰

Dīpacandra

Dīpacandra, with the title of Vācaka, was the author of the *Laṅghanapathyanirṇaya*,⁹¹ a work on fasting and diet, especially in the treatment of fevers. The treatise consists of a laṅghanaprakaraṇa on fasting in 215 and a pathyaprakaraṇa on wholesome articles of diet in 116 stanzas.⁹²

The following sources are quoted: *Amṛtasāgara*,⁹³ *Ānandamālā* (by Ānandabhāratī Yatindra), *Bhāvaprakāśa*, *Bhela*, *Bhīṣakcitracittotsava*,⁹⁴ *Cakradatta*, *Caraka*, *Cikitsā-mṛta* (sāgara),⁹⁵ *Cikitsāratnabhūṣaṇa*,⁹⁶ *Dāmodara*, *Gāruḍīsaṃhitā*, *Hārīta*, *Hitopadeśa*,⁹⁷ *Jvaratimirabhāskara* (by Cāmuṇḍa), *Kālaḍjñāna*, *Kṣemakutūhala*, *Lakṣmaṇotsava*, *Mādhavanidāna*, *Siddhāntaśiromaṇi*,⁹⁸ *Sūpakāragrantha*, *Suṣeṇa*, *Suśruta*, *Toḍarāna-nda*, *Vāgbhaṭa*, *Vaidyakaśaṃjīvana*,⁹⁹ *Vaidyakaśārasaṃgraha*,¹⁰⁰ *Vaidyasarvasva*,¹⁰¹ *Vaidyavinoda*,¹⁰² *Vaṅgasena*, *Vṛddhasuśruta*, *Vṛddhavyāṇḍa*, and *Vṛṇḍa*.¹⁰³

The author and his date

No particulars are known about the author, except his being a Jaina, as appears from his title Vācaka. He composed his work in 1735/36 under the reign of Jaisimha II of Jaypur.¹⁰⁴ He was a pupil of Dayātilakopādhyāya¹⁰⁵ and belonged to the tradition of Jinadattasūri.¹⁰⁶ Other works of the same author are a Hindī commentary on Kalyāṇadāsa's *Bālatantra* and an unspecified *Vaidyakagrantha*.¹⁰⁷

Ekojī

Ekojī, one of the Maratha kings of Tanjore, is credited with a work called *Āyurveda*.¹⁰⁸

Gopāladāsa Vaidya

Gopāladāsa Vaidya, son of Siddheśvara and grandson of Rāmarāma of Dvārāndhara, was the author of the *Yogāmṛta*, written in 1771/72. This work is provided with an auto-commentary called *Subodhinī*.¹⁰⁹

Govindadāsa

Govindadāsa was the author of the *Bhaiṣajyaratnāvalī*,¹¹⁰ a very large treatise, mainly in verse, on therapy and a number of other subjects. The 12,360 verses of the work are arranged in 106 chapters (prakaraṇa).

Contents

Chapter one describes the descent (avatāra) of āyurveda to the human world in its own way, thereby mentioning Caraka, Suśruta and Vāgbhaṭa as the three great masters of the medical science. Chapter two is about the purification (śodhana) and killing (māraṇa) of a series of substances used for iatrochemical purposes.¹¹¹ Chapter three (miśravargaprakaraṇa) is concerned with various general subjects connected with medicine. Chapter four (paribhāṣāprakaraṇa) is about weights and measures (1–14), groups of medicinal substances (15–44), some medicinal preparations (45–56), substitutes for rare drugs (57–100), and subjects related to the preparation of drugs (101–130).¹¹²

Chapters five to seventy-two are concerned with the treatment of diseases, for the greater part arranged in agreement with the *Mādhavanidāna*.¹¹³ Verses on nidāna are absent. The rasauśadhas are preceded by āyurvedic prescriptions. Chapter seventy-three deals with rasāyana, seventy-four with vājīkaraṇa, seventy-five with the suppression of ejaculation (vīryastambha).

Chapters 76–106 describe diseases, together with their treatment, which are absent from the *Mādhavanidāna*. Three paśiṣṭa chapters are about pitaroga, kapharoga, and some especially efficient formulae (anubhūṭayoga), which are said to derive from Rājeśvaraśāstrin.¹¹⁴

Sources are not mentioned in the body of the text.¹¹⁵

The *Bhaiṣajyaratnāvalī* is quoted in Ambikāḍattaśāstrin's commentary on the *Rasendrasārasaṃgraha*, Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the *Āyurvedīya Khanijavijñāna*, Guṭrājīśarmamiśra's *Viśikhānu-praveśavijñāna*, Hariprapanna's *Rasayogasāgara*, Hariśaraṇānanda's *Kūṭīpakvarasānirmānavijñāna*, Jīvanandavidyāsāgara's commentary on the *Rasendrasārasaṃgraha*, Nirañjanaprasāda Gupta's *Pāradasaṃhitā*, the *Rasadhātuprakāśa*, and Yādavajī Trikamajī Ācārya's *Rasāmṛta* and *Siddhayaogasamgraha*. It was one of the sources of Āryadāsa Kumārasiṃha's *Kvāṭhamānimālā*, the *Bheṣajasaṃhitā*, Devasiṃha Viṭṭhal's *Bṛhadāsavārīṣṭasaṃgraha*, Viśvanātha Dvivedī's *Rasendrasambhava*, and the *Rasoddhāratānta*.

Special features

In contrast with the *Mādhavanidāna*, two separate chapters are devoted to jvarātisāra (6) and plīhayakṛdroga (41). The treatment of one series of thirteen saṃnipāta fevers is described: śītāṅga, tandrika, pralāpaka, raktaśhīvin, bhugnanetra, abhinyāsa, jihvaka, sandhika, antaka, rugdāha, cittabhrama, karṇika, and kaṇṭhakubja (5.277–324). An unusual fever is nāsikājvara (5.1410–1413).¹¹⁶ The chapter on atisāra mentions the treatment of śothātisāra (7.77–78). The chapter on vātavyādhi has two different lists of gandhadravayas to be used in the preparation of fragrant oils (26.302 and 303–306); the same chapter describes the purification (śuddhi) of aromatic substances and refers to techniques of gandhaśāstra (443–469); it also deals with tests giving answers about the genuineness or adulteration of fragrant substances (470–507).¹¹⁷ The chapter on masūrīkā refers to the śītalāstotra (59.44) and mentions some other deities to be invoked in this disease (59.42–43). The chapter on diseases in pregnant

women describes the ubhayatrimśaka and ubhayapañcadaśa yantras (68.64–66); it also refers to the rākṣasi Jambhālā, who procures an easy delivery (68.67). Rāvaṇa's *Kumāratantra* is quoted in the chapter on children's diseases (71.182–193); the same chapter mentions the disorders called āhiṇḍikā (71.13 and 16)¹¹⁸ and paścādrū(a) (71.81 and 82). Each chapter closes with the enumeration of what is beneficial (pathya) and harmful (apathya) in a particular disease. The third paśiṣṭa chapter mentions disorders called snāyudaurbalya and svapnameha.¹¹⁹

The most noteworthy feature of the *Bhaiṣajyaratnāvalī* consists of the description of a long series of diseases, together with their treatment,¹²⁰ which are for the greater part rare in other āyurvedic treatises and betray the influence of western medicine.¹²¹

These diseases, added in a viśiṣṭarogādhikāra (chapters 76–106) are: āmāśayaroga (76),¹²² smaromāda (77),¹²³ gadodvega, also called apādārtharoga (78),¹²⁴ tattvonmāda, also called brahmamoha (79),¹²⁵ acalavāta (80),¹²⁶ tāṇḍavaroga (81),¹²⁷ snāyuroga, also called snāyusūla (82),¹²⁸ skhālitya (83),¹²⁹ khañjanikā (84),¹³⁰ urastoya (85),¹³¹ bahumūtra (86),¹³² somaroga, mūtrātisāra,¹³³ and madhumeha¹³⁴ (87), śukrameha (88),¹³⁵ aupasargikameha, also called pūyameha, vranameha, and āgantumeha (89),¹³⁶ ojomeha (90),¹³⁷ lasikāmeha (91),¹³⁸ dhvajabhaṅga, also called klaibya (92),¹³⁹ vṛkkaroga (93),¹⁴⁰ klomaroga (94),¹⁴¹ phiraṅgaroga, also called gandharoga (95),¹⁴² snāyukaroga (96),¹⁴³ pāradavikāra (97),¹⁴⁴ śīrṣāmburoga (98),¹⁴⁵ mastiṣkavepana, also called śīrṣavepana and -vepathu (99),¹⁴⁶ mastiṣkakaya, also called mastiṣkavṛddhi, and mastiṣkāpacaya, also called mastiṣkahrāsa (100),¹⁴⁷ amśughāta (102),¹⁴⁸ yośāpatantraka, also called yośāpasmāra (103),¹⁴⁹ yonikaṇḍū (104),¹⁵⁰ aṇḍādhāraroga (105),¹⁵¹ and apamumūṛṣu (106).¹⁵²

Chapters 76–106 contain a number of compound medicines, in particular rasayogas, thought to be specifics against diseases mentioned in these chapters.¹⁵³ Yogas described in preceding chapters (five to seventy-five) are repeatedly referred to.

Religious and magical practices said to cure particular diseases are also mentioned.¹⁵⁴

The materia medica consists for the greater part of the usual āyurvedic and iatrochemical substances.

Noteworthy names of medicinal plants and plant products are:¹⁵⁵ ācu (54.353),¹⁵⁶ ākārakarabha (75.15), amlaṇī,¹⁵⁷ āsāraṇa (5.672),¹⁵⁸ asraghñī,¹⁵⁹ asthikarkāṭa (5.430),¹⁶⁰ bakapuṣpa (32.39),¹⁶¹ bakapuṣpikā,¹⁶² bhadrotkaṭa (8.392; 69.21),¹⁶³ bhekī,¹⁶⁴ bhūkūṣmāṇḍa (74.59),¹⁶⁵ bhūmikūṣmāṇḍa,¹⁶⁶ bṛhadbhaṇḍī (paśiṣṭa 2.30),¹⁶⁷ camarīphala (45.48),¹⁶⁸ candraprabhā,¹⁶⁹ candraśūra (101.5), copacīnī (95.24), daṇḍinī,¹⁷⁰ dārusitā (16.108),¹⁷¹ dhanīyaka (37.211),¹⁷² dhavalāṅkaṭha (41.138),¹⁷³ gandhālīkā,¹⁷⁴ gandhamātṛkā (26.305; 66.33),¹⁷⁵ gandhapatraka (26.508),¹⁷⁶ ghaṇṭakarna(ka) (56.58, 72, 89),¹⁷⁷ girikanyā,¹⁷⁸ guñjākinī (5.672),¹⁷⁹ hastiśuṇḍī (5.628; 82.20), hastiśuṇḍikā (5.658),¹⁸⁰ hemāmbhodhara (30.216), indrasūra (10.221; 181.45, 48),¹⁸² irima (61.104),¹⁸³ jalakarṇā (14.120),¹⁸⁴ jāmātar (56.79),¹⁸⁵ jayitri (8.179),¹⁸⁶ kapihastaka,¹⁸⁷ kapotavaktraka (36.13),¹⁸⁸ karṇamoraṭa (5.1416),¹⁸⁹ kāṣṭhamārjārikā,¹⁹⁰ kāsunda (54.352),¹⁹¹ keśākhya (5.575),¹⁹² kinkinī (65.152 and 154),¹⁹³ kūlika (72.50),¹⁹⁴ kundakhoṭī (8.217),¹⁹⁵ mahādreka (37.210),¹⁹⁶ maurvī,¹⁹⁷ mocaka (74.230),¹⁹⁸ nāgaparnī,¹⁹⁹ padmāṭa (54.210; 61.106),²⁰⁰ pītamūlī (98.9 and 11),²⁰¹

rājahemaka (65.154),²⁰² rājasvarṇaka,²⁰³ raktapuṣpa,²⁰⁴ rocana,²⁰⁵ śālīṇica (5.576; 10.306), śālīṇī,²⁰⁶ śālmāṇimocaka,²⁰⁷ saurī (26.503),²⁰⁸ sudhāmūlī (15.194),²⁰⁹ svarṇadhustūra (5.651),²¹⁰ śvetadhūnaka,²¹¹ tīkṣṇaparṇa (5.650),²¹² tripurabhaṇḍikā or -bhaṇṭikā (5.671),²¹³ ṛṇaparṇa (54.210),²¹⁴ ulla (56.59),²¹⁵ vaivasvatadruma (54.364),²¹⁶ vakama,²¹⁷ and vanasarṣapa (5.670),²¹⁸

Inorganic substances mentioned are rasakarpūra (95.10–11) and soraka (89.22).

Distillation is clearly described in the verses on the preparation of mṛtasamjivānī surā (5.1261–1272; 74.372–386).²¹⁹ Yantras used are the bakayantra (pariśiṣṭa 3.19), kacchapayantra (9.182), mocikā- and mayūrākhyayantra (5.1269; 74.376), and the ga-jakumbha (74.378).²²⁰

The third pariśiṣṭa chapter, containing recipes deriving from Rājesvaraśāstrin, mentions kattiraka (51), khatamī (22), sālibāhvā (50), sāmudranārikela (42), ṛṇakānta (40), unnābaka (23), and vanapsikā (22). It refers to Yūnānī medicine (yāvana vaidyaka; 48), and gives the formula of a Yūnānī compound medicine, called yāvanaratneśvara or jawāhīr mohrā (40–48).

The author

Govindadāsa²²¹ was the son of Candracūḍa and Ambikā.²²² He may have been a Bengal physician since the MSS of the *Bhaiṣajyaratnāvalī* are found exclusively in Bengal.²²³

Date

The work is usually assigned to the eighteenth century.²²⁴ It has to be taken into account that chapters two and four, and in particular chapters 76–106, do not belong to the original text, but were probably added by Brahmaśaṅkara Miśra in the nineteenth century.

Guṇavilāsa

Guṇavilāsa, a Jain monk of the Kharataragaccha, wrote the *Guṇaratnaprakāśikā* in A.D. 1715/16.²²⁵

Haṃsarāja Pippalaka

Haṃsarāja Pippalaka, a Jain, was the author of the *Mūtralakṣaṇa*, a work dating from the eighteenth century of the Vikrama era, i.e., about A.D. 1650–1750.²²⁶

Jogīdāsa

Jogīdāsa, known as Dāsakavi, wrote the *Vaidyakaśāra*, a therapeutic treatise, written in Rājasthānī on the request of Jorāvarasiṃha, eldest son of Mahārāja Sujānasiṃha of Bikāner (1700–1735).

The author was a Śvetāmbara Jain monk, son of Joṣīrāya. He completed his treatise in A.D. 1705/06.²²⁷

Kāpālika

Kāpālika wrote a monograph on eye diseases, the *Kāpālikagrantha* or *Netraroganidāna*,²²⁸ under the reign of Shāhajī, one of the kings of Tanjore.²²⁹

Kāśīnātha

Kāśīnātha was the author of the *Laighanapathyanirṇaya*.²³⁰

Keśavarāma

Keśavarāma or Vyāsakeśavarāma was the author of the *Laghunighaṇṭa* or -*nighaṇṭu*, also called *Auśadha*-, *Auśadhi*- and *Oṣadhināmamālā*.²³¹

Contents

The treatise consists of 237 verses which, the first and last verse excepted, enumerate the names and properties of a series of drugs of vegetable, animal and mineral origin.²³² The Sanskrit synonyms are preceded by their Gujarātī equivalents. The absence of a large number of important medicinal substances, e.g., aśoka, balā, candana, dantī, kuṭaja, mūrvā, lodhra, śigru, and yaṣṭimadhu, cannot be explained.²³³ In general, it remains completely obscure on which grounds the author decided to include or omit particular items of the Indian materia medica.

Sources are not indicated but the resemblance of many of the strings of synonyms with those found in the *Dhanvantarīyanighaṇṭu*²³⁴ indicate the author's indebtedness to that work and his lack of originality. The description of the medicinal qualities does, however, not tally with the *Dhanvantarīyanighaṇṭu*.

Special features

Although yavānī itself is not described, the author mentions pārasīkayavānī (67cd–68ab) and sugandhakarakabha (68cd; called khurāsānī yavānī in Sanskrit) as two distinct plants.²³⁵ Three types of punarnavā are referred to (172–173ab).²³⁶ Opium and Cannabis are absent.

The author

At the end of the work the author mentions that his name is Vyāsakeśavarāma, pupil of Dhanvantari. He apparently belonged to Gujarāt because he included the Gujarātī names of the drugs described.

Date

The author is assigned to the end of the eighteenth century by the editors of the *Laghunighaṇṭa*.²³⁷

Lakṣmīcand

Lakṣmīcand, a Jain monk of the Kharataragaccha, pupil of Amaravijaya, wrote a *Vaidyakagrantha* in Hindī in the first half of the eighteenth century.²³⁸

Mahādevadeva

Mahādevadeva²³⁹ was the author of the *Hikmatprakāśa*²⁴⁰ and *Hikmatpradīpa*,²⁴¹ two treatises on Yūnānī medicine written in Sanskrit.

The *Hikmatprakāśa*²⁴² is a work of 1,910 verses arranged in three sections (khaṇḍa).

Contents²⁴³

Section one (seventy-nine verses) deals with the principles of Yūnānī medicine; it describes the four humours, their qualities and the grades of these qualities, the various powers (śakti) of drugs, the examination of the urine and that of the pulse. Section two (1,142 verses) is on medicinal substances, their names, varieties, properties and uses, both single and compound; substitutes are also mentioned in many cases. This section is divided into twenty-eight Vargas; the drugs have been grouped together according to the initial letter of their name and according to the order of the Arabic alphabet. Section three (689 verses) describes in twenty-one Vargas a number of medicinal preparations, also arranged in agreement with the Arabic alphabet.

The treatise is based on Persian medical works²⁴⁴ which explains that it abounds in Persian and Arabic medical terms. These terms are often explained, either in the text itself or in the ṭīkā that accompanies it. The Sanskrit or Hindī equivalents of the Persian names of drugs are rather frequently recorded. The names of diseases are for the greater part those known from āyurvedic treatises.

The *Hikmatprakāśa* is quoted in Mauktika's *Vaidyamuktāvalī*.

Special features

Disorders of the lungs (phupphusa) are often referred to (e.g., 2.58, 99, 606, 616). Some diseases mentioned without any Sanskrit equivalent are ahbal (2.974), khunāk (2.490; a disease of the throat),²⁴⁵ nākhūnā (2.100, 949 and 1066),²⁴⁶ ramad (2.153; an eye disease), and sojāka (3.666).²⁴⁷

The author

The author mentions his name and descent in one of the introductory verses: his name is Mahādevadeva,²⁴⁸ son of Bālakṛṣṇadeva, grandson of Nṛsiṃhadeva. The frequent allusions to mythology²⁴⁹ prove that he was a Hindu by faith.

Date

The treatise was, as indicated at the end, completed in A.D. 1773/74.²⁵⁰

Mahāprakāśa²⁵¹

Mallinātha

Mallinātha, son of Seṅganātha, was the author of the *Pathyāpathyanirūpaṇa*, composed in 1720,²⁵² and the *Vaidyakalpataru* or *Kalpataru*.²⁵³

Mukunda

Mukunda, son of the astrologer (gaṇaka) Raṅganātha of Vātsyāyana lineage, was the author of the *Upacārasāra*,²⁵⁴ a work on medicines and charms in five chapters: dravyajñaptinirūpaṇa (110 verses), rogavyaktinirūpaṇa (100 verses), kvāthādinirūpaṇa (210 verses), prakīrṇanirūpaṇa (64 verses), and rasādyupacāranirūpaṇa (232 verses).²⁵⁵

The *Upacārasāra* is quoted in Karandīkar's *Nidānadīpikā*.

The treatise was probably composed at the end of the eighteenth or beginning of the nineteenth century because Dinakara, an astronomer (jyautiṣa), son of Ananta and Gaṅgā, of Śāṇḍilyagotra, a resident of Golappa, wrote a commentary, called *Gūḍhaprakāśikā*, on it at Poona in 1818.²⁵⁶

Mukundadeva Mahārāja

Mukundadeva Mahārāja is the reputed author of the *Tailārṇava*, an elaborate treatise on medicinal oils probably composed in A.D. 1799.²⁵⁷

Nandakīśoramiśra

Nandakīśoramiśra, son of Veṇīprasāda, of Gautamagotra, composed his *Cikitsāsārasaṃgraha* in A.D. 1757/58, during the reign of Mādhava Rāo Scindia.²⁵⁸

Narasimhakavirāja

Narasimhakavirāja,²⁵⁹ son of Nilakaṇṭhabhaṭṭa,²⁶⁰ pupil of Rāmākṛṣṇabhaṭṭa, preceptor of Vaidyacintāmaṇi, was the author of (1) *Madhumatī*,²⁶¹ (2) *Prayogāmṛta*,²⁶² (3) *Ratnamālā*²⁶³ or *Rasaratnamālā*,²⁶⁴ (4) a commentary, called *Siddhāntacintāmaṇi*, on the *Mādhavanidāna*,²⁶⁵ (5) a commentary, called *Tattvaparakāśakaustubha*, on the *Carakasamhitā*,²⁶⁶ and (6) the revised version of the *Dravyaguṇarājavallabha*.²⁶⁷

The *Madhumatī*, a treatise in 8,672 verses,²⁶⁸ describes the therapy of diseases, which are arranged in agreement with the *Mādhavanidāna*; chapters on rasāyana and vājīkaraṇa are added. The last part of the work is about iatrochemistry; subjects dealt with are: rasaśodhana, rasamūrchana, rasabandha, rasamāraṇa, uparasādi, viśādi, lauhasaṃskāra, lauhamāraṇa, anupāna.²⁶⁹

Narasimhakavirāja must have lived during the eighteenth century, because his pupil, Vaidyacintāmaṇi, composed his *Prayogāmṛta* towards the end of that century.

Nārāyaṇa Bhiṣaj

Nārāyaṇa Bhiṣaj²⁷⁰ was the author of (1) *Karmaprakāśa*,²⁷¹ (2) *Vaidyacinṭāmaṇi*,²⁷² (3) *Vaidyāmṛta*,²⁷³ (4) *Vaidyavṛnda*,²⁷⁴ and (5) *Vātaghnatvādinirṇaya*.

Nārāyaṇadāsa Kavirāja

Nārāyaṇadāsa Kavirāja was the author of a number of medical works. His *Āyurveda-paribhāṣā*,²⁷⁵ *Cikitsāparibhāṣā*,²⁷⁶ *Paribhāṣā*,²⁷⁷ *Upaskāracikitsāṅgaparibhāṣā*,²⁷⁸ and *Vaidyaparibhāṣā*,²⁷⁹ recorded in the catalogues and histories of Indian medicine, may well refer to one and the same work. He is also credited with a *Nānau-śadhapariccheda*,²⁸⁰ with a commentary, called *Siddhāntasaṃcaya*, on Śārṅgadhara's *Triṣaṭī*,²⁸¹ with the revised version of the *Dravyagunarājavallabha*, also called *Rājavallabhanighaṇṭu*,²⁸² and with the *Vyādhiśaṃkara*.²⁸³

Nidhi or Navanidhirāma

Nidhi or Navanidhirāma, son of Mahātman Sāhimalla, was the author of the *Yogasamuccaya*, composed in 1755/56.

Sources referred to in this work are: *Lakṣmaṇotsava*, *Rasamañjarī*, *Samṇipā-takalikā*, Śārṅgadhara, *Vaidyājīvana*, *Vaidyasāgara*, *Vaidyavallabha*,²⁸⁴ *Vaidyavinoda*, *Yogacintāmaṇi*, and *Yogaśata*.²⁸⁵

Pītāmbara

Pītāmbara, a Jain monk, pupil of Jiva of the Āgamagaccha, is sometimes²⁸⁶ said to be the author of the *Anupānāmañjarī*,²⁸⁷ a treatise in 151 verses on anupānas to be employed in order to counteract disorders caused by inorganic and poisonous substances, or to prevent the occurrence of these disorders.

The work is divided into six chapters (samuddeśa or paṭala), devoted respectively to disorders brought about by dhātus (chapter one), upadhātus (chapter two), poisons of vegetable origin (chapter three), and animal poisons (chapter four), to the killing (māraṇa) of the dhātus and upadhātus (chapter five), and finally to the anupānas to be prescribed in various diseases (chapter six).²⁸⁸

Pītāmbara wrote his work in Arjunapura or Ānāpura²⁸⁹ of Kūrmadeśa²⁹⁰ in the second half of the eighteenth century.²⁹¹

The *Anupānāmañjarī* is referred to in the *Amṛtasāgara* of Pratāpasimha.

Pītāmbara

Pītāmbara, pupil of Vinayasāgarasūri of the Vijayagaccha, wrote the *Āyurvedasā-rasamgraha*,²⁹² a collection of formulae in Mewārī prose.

The recipes, containing vegetable drugs only, were obtained from a number of physicians mentioned by name: Ṛṣi Khimsī, Joṣī Bhagvandās, Ṭhākursī Nāṇāval,

Bālgiri, etc.

The work was completed in Udaypur in A.D. 1702/03.²⁹³

Pratāpasimha

Pratāpasimha, Mahārāja of Jaypur, son of Mādhavasimha and grandson of Īśvarasimha, who flourished in the latter half of the eighteenth century (1778–1803), is credited with the *Amṛtasāgara*, more probably written at his behest.²⁹⁴ This work, originally written in Mārwarī, deals chiefly with nidāna and cikitsā.

Contents²⁹⁵

The treatise, composed in Sanskrit verse and Hindī prose, is arranged in four sections (khaṇḍa), divided into chapters (taraṅga).

The utpattikhaṇḍa has five chapters, which are about the descent of āyurveda, embryology, anatomy, and some general subjects. The vicārakhaṇḍa is arranged in twenty-three chapters, which are concerned with the examination of the pulse and other forms of parīkṣā, anupānas, alchemical yantras, the purification of the dhātus, etc., weights and measures, pharmaceutical preparations, the properties of drugs and articles of food, sneha, vamaṇa, etc. The nidānakhaṇḍa describes in forty-four chapters the diseases, generally in the order of the *Mādhavanidāna*. The cikitsākhanda, also in forty-four chapters, is about treatment.

The *Amṛtasāgara* adds the following diseases to those described in the *Mādhavanidāna*: one series of thirteen samṇipāta fevers (III.3; IV.3), āmavātasamgrahaṇī (III.7), bhasmaka (III.9; IV.9), a number of eighty-four vātāroga (III.16), the forty pitta and twenty kapha disorders (III.20), seven additional types of insanity (unmāda) (III.15),²⁹⁶ vardhma (III.28; IV.28), snāyu and phiraṅgavāta (III.36; IV.36), somaroga and mūtrātisāra (III.41; IV.41), mantharajvara (III.42; IV.42),²⁹⁷ and seven acquired types of klaibya (male infertility and impotency) (III.43).²⁹⁸ The treatments consist of both āyurvedic prescriptions and rasayogas. Mantras are found in some chapters (IV.4, 15, 41), as well as yantras (IV.15 and 41).

The original *Amṛtasāgara* is referred to as *prācīnāmṛtasāgara* (III.18), *purāṇāmṛtasāgara* (III.19), and *pūrvāmṛtasāgara* (III.15).

Sources of Sanskrit verses are: *Anupānadarpaṇa* (II.4),²⁹⁹ *Bhāvaprakāśa* (often), Mādhava (III.19), Manu (III.19), *Rasapradīpa* (II.3), *Ratnaprabhākara* (II.3),³⁰⁰ Śārṅgadhara (II.7), and *Vaidyājīvana* (II.1).

Sources mentioned in the Hindī text³⁰¹ are: *Anupānāmañjarī* (II.4),³⁰² Ātreya (IV.26), Ātreyamata (III.26), *Bhāvaprakāśa* (often), *Bhānnighaṇṭu* (II.16), *Cakradatta* (IV.12, 15, 16, 19, 24, 25, 26, 27, 43), *Cakrapāṇidatta* (III.3), Caraka (III.13 and 26; IV.25), *Dhanvantarisamhitā* (IV.11), Hārīta (III.42; IV.11), *Jvaratimirabhāskara* (III.2; IV.2), *Kāśīnāthapaddhati* (IV.11, 20, 27), Kṣīrapāṇi (III.42), Lolimbarāja (IV.1, 2, 3, 12), *Mādhavanidāna* (III.4, 15, 19, 27, 31, 42), *Manusmṛti* (III.19), *Nighaṇṭuprakāśa* (II.6), *Rājanighaṇṭu* (II.14, 16, 17, 19, 21), *Rasarājyalakṣmī* (IV.11), *Rasaratnādīpa* (IV.19), *Rasaratnākara* (II.4), *Rasārṇava* (IV.19), *Rasasamgraha* (IV.34), Rāvaṇa's *Kumāratantra* (III.42), Rudradatta (IV.12),³⁰³ Śārṅgadhara (II.4, 5, 7), *Sarvasamgraha*

(IV.8, 10, 12, 13, 20, 23, 26, 33),³⁰⁴ *Śivamata* (IV.8), *Suśruta* (II.13 and 21; III.17, 26, 42), *Trīṣaṭagrantha* (IV.1),³⁰⁵ *Uddiṣaṭantra* (IV.15), *Vāgbhaṭa* (II.1; III.26; IV.38), *Vaidyājīvana* (II.1; IV.1 and 9), *Vaidyakutūhala* (IV.32),³⁰⁶ *Vaidyarahasya* (IV.3, 7, 8, 9, 10, 11, 12, 13, 15, 18, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30, 32, 36, 38, 39, 40), *Vaidyaratna* (IV.31), *Vaidyavallabha* (IV.38), *Vaidyavinoda* (IV.1, 6, 8, 10, 11, 12, 13, 14, 15, 18), *Vaidyopacāra* (IV.14),³⁰⁷ *Vṛnda* (IV.8, 12, 14), *Yogacintāmaṇi* (IV.3, 12, 41), *Yogaratnāvalī* (IV.15 and 24), and *Yogatarāṅgiṇī* (IV.8, 9, 11, 16, 19, 20, 24, 27, 32).

The *Rājavallabhanighaṇṭu*

The *Rājavallabhanighaṇṭu*³⁰⁸ is a nighaṇṭu dealing chiefly with articles of diet and related subjects. Its contents prove that it was intended for use at a royal court.

Contents³⁰⁹

The 971 verses of this treatise are arranged in six chapters (pariccheda). Chapters one, called *prābhātika* (26 verses), and two, called *paurvāhnikā* (151 verses), are about *dinacaryā* and kindred subjects. Chapter two deals, among other things, with oils (2.44–58), rubbing the feet, hands, and body with these oils (2.59–69), the qualities of water of diverse origin (2.70–121), the use of water for drinking and bathing purposes (2.122–132), articles of clothing (2.133–136), and fragrant substances employed for anointing the body (2.137–149). Chapter three, called *mādhyaṇna* (583 verses), is about the properties of grain and pulse (3.2–42), vegetables (3.43–214), fish (3.215–267), meat (3.268–316), alcoholic and other fermented beverages (3.317–331), honey (3.332–351), milk and dairy products (3.352–410), the sugarcane and its products (3.411–430), spices, condiments, salt and caustics (3.431–465), prepared dishes (3.466–535), rules concerning the taking of food (3.536–563), and the chewing of betel (3.564–580). Chapter four, called *aparāhna* (29 verses), is concerned with the types of country (4.6–9), as well as with *rasa* and *vipāka* (4.10–29). Chapter five, called *niśābhava* (31 verses), is about subjects pertaining to the generation of offspring. Chapter six, called *auśadhāśraya* (151 verses), deals with the properties of a series of drugs (6.1–111) and the regimen during the seasons.³¹⁰

Sources are not referred to by the author.³¹¹

Rājavallabha is quoted in Baladeva Prasāda Miśra's *Āyurvedacintāmaṇi*, the commentary on Govindasena's *Paribhāṣāpradīpa*, and the *Śāliḡrāmaṇighaṇṭubhūṣaṇa* of the *Brhannighaṇṭuratanākara*. A commentary (*vivṛti*) on the *Rājavallabhanighaṇṭu* was written by Gaṅgādhara.³¹²

Special features

The nighaṇṭu sections in the proper sense do not enumerate synonyms. Noteworthy plants mentioned are: *boravavṛhi* (3.16), *celāna* (3.104),³¹³ *cīruka* (3.171), *halīnaka* (6.42),³¹⁴ *jayapāla* (6.91), *jhiṅgāka* (3.99),³¹⁵ *kacvī* (3.115),³¹⁶ *kaṇṭā* (3.172–174),³¹⁷ *kāsundī* (3.436),³¹⁸ *khaṇḍakarṇa* (3.121),³¹⁹ *mahārāstrī* (3.72),³²⁰ *mahārda* (3.166),³²¹ *sairipa* (6.41),³²² *śakraśana* (6.48),³²³ *śālīṅca* (3.58),³²⁴ *śuṣaṇī* (3.72), and *uḍikā* (3.22–

24).³²⁵

Names of fishes mentioned are: *ādimatsya* (3.231), *bhallakī* (3.233), *bhākuṭa* (3.229), *caladaṅga* (2.257), *campakunda* (3.252), *candraka* (3.251), *ciḍaṅga* (3.247), *cilacima* (3.263), *citraphala* (3.234), *daṇḍika* (3.253), *elaṅga* (3.261), *gaḍaka* (3.258), *gaḍiṣa* (3.250), *gargara* (3.235), *gavāṭī* (3.264), *iliṣa* (3.238), *kavapī* (3.248), *khaliṣa* (3.256), *kṣudraśapharī* (3.265), *kuliṣa* (3.237), *madgura* (3.241), *malaṅgī* (3.255), *nandāvarta* (3.236), *parvatī* (2.259), *pāṭhina* (3.230), *phali* (3.246), *proṣṭhī* (3.240), *rohita* (3.228), *śakalī* (3.249), *śakula* (3.243), *śilinda* (3.231), *śṛṅgī* (3.242), *trikaṇṭa* (3.254), *vāca* (3.260), *vallīgaḍa* (3.262), *vāpuṣa* (3.239), *varmi* (3.245), and *varmuṣa* (3.244).

The author

The text known as *Rājavallabhanighaṇṭu* is usually said³²⁶ to be the version revised by Nārāyaṇadāsa Kavirāja.³²⁷ Almost nothing is known about the original author, who is sometimes credited with two more medical works, the *Rājavallabhaparyāyamālā* and the *Ratnamālā*.³²⁸ According to some authorities³²⁹ he must have been an inhabitant of Bengal since the fishes described are well known there; according to others³³⁰ he may as well have belonged to the eastern part of Uttar Pradesh.

Date

Nārāyaṇadāsa Kavirāja is assigned to the eighteenth century.³³¹ The date of composition of the original of the *Rājavallabhanighaṇṭu*, prior to its revision, is unknown.

Raṅgajyotirvid

Raṅgajyotirvid is the author of a monograph on the treatment of haemorrhoids, called *Vicārasudhākara* or *Arśoghnaśudhākara*, written for the future Peshwā,³³² Raghunātha Rāo (1773/1774), in 1765. The surgical treatment of haemorrhoids current among the Yavana or English physicians is referred to in this work.

The author mentions a number of contemporary physicians by name: Bābā Bhiṣagvarya, Bāgājī Vaidya, Balvantrāya Vaidya, and Jaya Śaṃkara. Sources of the work are: *Ātreyaśaṃhitā*, *Atriśaṃhitā*, *Bhāvaprakāśa*, *Caraka*, *Cikitsāśāstraśāstra*, *Dhanvantariprakāśa*,³³³ *Sārasaṃgraha*, *Sārasamuccaya*, *Suśruta*, *Vāgbhaṭa*, *Vaidyāmṛta*, *Vṛndasaṃgraha*, *Yogatarāṅgiṇī*, etc.

The author, son of Sūryavidhijña, was a resident of Junnār³³⁴ in the Poona district; he died after 1780.³³⁵

Śaṃkara

Śaṃkara, whose full name was Plāntōl Śaṅkaran Mūs, wrote the *Nidānapradīpa*, described as a work on the diagnosis of various ailments found scattered in *Vāgbhaṭa*'s *Aṣṭāṅgaḥṛdayasaṃhitā*.³³⁶ Another work by the same author is the *Lalitā* commentary on the *Aṣṭāṅgaḥṛdayasaṃhitā*.³³⁷

Śaṇḍhacikitsā³³⁸

Tulajā I

Tulajā I,³³⁹ alias Tukkojī I (1729–1735), one of the Maratha kings of Tanjore, son of Ekojī I and Dīpāmbikā, father of Ekojī II, is credited with three medical works: (1) *Āyurveda*,³⁴⁰ (2) *Dhanvantarisāranidhi*,³⁴¹ and (3) *Dhanvantarivilāsa*.³⁴²

Vaidyacināmāṇi

Vaidyacināmāṇi, son of Vaidyaratna and pupil of Narasiṃhakavirāja, is often regarded as the author of a very bulky medical work called *Prayogāmṛta*.

The author was a native of Niroḷ, a village belonging to the Śrīkhaṇḍa community. He completed his treatise at the end of the eighteenth century.³⁴³

The work³⁴⁴ begins with the preparation of metals, etc., for medical use (rāsādījāra-ṇavidhi), diagnostic procedures (the examination of the pulse, tongue, and urine), and taking the history of a patient (vaidyapraśnavidhi). The major part is concerned with therapy.

The order of the diseases is mostly in conformity with the *Mādhavanidāna*, but shows a number of additions and changes. Chapters on kṛmi and uraḥstambha occur between those on vātaroga and āmavāta. The chapter on hṛdroga is followed by one on urograha. A chapter on phuliṅgaroga³⁴⁵ is added between those on upadamaśa and śūkadōṣa; snāyuka is dealt with between visphoṭa and masūrīkā. The chapters on women's diseases are in the following order: pradara, strīṭānukaroga, somaroga, vandhyārōga, kākavandhyā, mṛtavatsā, yonivyāpad, garbhīṇīsevyāsevyavidhi, and garbhopakramaṇādividhi. The treatise ends with chapters on vājīkaraṇa and rasāyana.

Sources quoted are: Kaṇṭharava, *Mṛdānītantra*, Rāmarāja,³⁴⁶ *Rasayāmala*, *Ratnākara*, Śrīkaṇṭha,³⁴⁷ Sudāntasena, *Yogamuktāvalī*, *Yogarātana*, and *Yogarātnasamuccaya*.

The *Prayogāmṛta* is quoted in the *Śāligrāmaṇighaṇṭubhūṣaṇa* of the *Brhannighaṇṭunātākara*.

Vaidyarāja

Vaidyarāja, son of Viśārada (and nephew of Ratnamāṇi), son of Vaidyacināmāṇi, son of Vaidyavācaspati, son of Yadunātha, was the author of (1) *Sukhabodha*, (2) *Rasarasāṇava*, (3) *Rasapradīpa*, and (4) *Vaidyamahodadhi*.

The *Sukhabodha*³⁴⁸ is a comprehensive work on therapeutics, written in a clear and easy style.

Apart from well-known authorities like Caraka, Suśruta and Vāgbhaṭa, it mentions the following sources: *Madanavinoda*, *Paribhāṣā*, *Rasādīpikā*, *Rasakalikā*, *Rasamañjarī*, *Rasaprayoga*, *Rasarātākara*, *Rasendracintāmāṇi*, *Rasendrakalpadruma*, *Śāraṅgadhara*, *Sārasaṅgraha*, and *Vaṅgasenaka*. It quotes, besides these, from *Agnipurāṇa*, *Garuḍapurāṇa*, *Gopā(la)saṃhitā*,³⁴⁹ *Kumāratantra* (by Rāvaṇa), *Sāralatikā*,

Vāsudeva, and Viṣṇu.³⁵⁰

The *Sukhabodha* was compiled in A.D. 1567 or 1702,³⁵¹ but, as the *Rasendrakalpadruma*, quoted in it, dates from the middle or second half of the seventeenth century,³⁵² the date of composition cannot be but A.D. 1702.

The *Rasarasāṇava*³⁵³ is a short treatise in two chapters (upadeśa). The first deals with harītakīguṇāḥ and prakṛtyādi, the second with jvaralakṣaṇa, nāḍīparīkṣā, mūtraparīkṣā, tailaparīkṣā, netraparīkṣā, sādhyalakṣaṇa, asādhyalakṣaṇa, and nakṣatradoṣa.³⁵⁴

No particulars are known about the *Rasapradīpa*³⁵⁵ and the *Vaidyamahodadhi*.³⁵⁶

Vedakavi

Vedakavi was the author of an allegorical drama of the nāṭaka³⁵⁷ type on medicine, the *Jīvānanda*, or *Jīvānandana*.³⁵⁸

Special features

Interesting from a medical point of view are: the number of diseases assigned to a particular group; references to the doṣas, dhātus, layers of the skin, etc.; references to therapy; references to iatrochemistry and particular rasauśadhas.

The number of diseases mentioned repeatedly disagrees with the classical āyurvedic texts, but is in many cases in conformity with the *Śārīgadharaśaṃhitā*. In agreement with the classical treatises are the thirteen saṃnipāta fevers (58). Rudra's wrath as the origin of fever is described (272). The names of fever in non-human living beings and in inanimate substances,³⁵⁹ as given in the *Jīvānanda* (273–274), are: pākala in elephants, abhītāpa in horses, alarka in dogs, indramada in fish, jyotis in herbs, cūrṇapa³⁶⁰ in grain, nīlikā in water, and ūsa in earth. Atisāra is of seven (61),³⁶¹ grahaṇī of five types (273).³⁶² Haemorrhoids (arśāṃsi) are of six varieties (61 and 277).³⁶³ Sluggishness of the digestive fire (agnimāndya) is said to be the cause of all diseases (278).³⁶⁴ Bhasmaka, a disorder of the digestive fire leading to bulimia, has a prominent place in the *Jīvānanda* as an illness from which king Jīva suffers.³⁶⁵ Yakṣman³⁶⁶ is said to be caused by great sins (mahāpātaka; 127).³⁶⁷ The number of varieties is five in śvāsa (54),³⁶⁸ six in mūrchā (281),³⁶⁹ six in unmāda (61 and 282),³⁷⁰ four in āmavāta (281),³⁷¹ eight in śūla (102 and 277),³⁷² eight in gulma (61 and 102),³⁷³ and five in hṛdroga (102 and 282).³⁷⁴ Eight types of mūtrakṛcchra are distinguished (277),³⁷⁵ thirteen of mūtrāghāta (277),³⁷⁶ four (277) or twenty (61) of āsmarī,³⁷⁷ twenty of prameha (61 and 277),³⁷⁸ fifteen of vraṇa (61 and 102),³⁷⁹ eight of bhagandara (277),³⁸⁰ and eighteen of kuṣṭha (61).³⁸¹ The diseases of the oral cavity and throat (mukharoga) are said to be seventy-four (102 and 279),³⁸² those of the nose eighteen (102),³⁸³ and those of the eyes ninety-six (102) or ninety-four (279) in number.³⁸⁴ The number of diseases of the head is excessively high, namely one hundred (102).³⁸⁵ Five diseases of the chest (vakṣoja) are mentioned (102), which are unknown in āyurvedic treatises. The eighty diseases by vāta, forty by pitta, and twenty by kapha are referred to (278). Kapha (81) or kapha and pitta together (266) are said to be crippled (paṅgu), whereas vāta is considered to be the only active doṣa.³⁸⁶ The

relationships between the tastes and the doṣas are referred to (81), as well as those between the tastes and the seven dhātus (265).

The seven layers of the skin, the diseases located in each of the layers, and the treatment of these diseases are mentioned (248–255).³⁸⁷ Dinacaryā and ṛtucaryā are dealt with in act four. Several surgical instruments are described (205–207). Much importance is attached to iatrochemistry. Mercury and sulphur are important remedies in the *Jīvānanda*, as well as several rasaśuśadhas. Mercury is called Śiva's seed and sulphur Śarvānī's menstrual blood (35). Some of the processes to which mercury is subjected in Indian alchemy are mentioned (116). Some rasaśuśadhas referred to are, for example, ānandabhairava (291),³⁸⁸ cintāmaṇi (291), jvarāṅkuśa (291),³⁸⁹ mahātāleśvara (253),³⁹⁰ pūrṇacandrodaya (294), and rājamṛgāṅka (291).³⁹¹

The author and his date

The author of the *Jīvānanda* was a poet, called Vedakavi, who also composed another allegorical play, called *Vidyāparipāya*.³⁹² The *Jīvānanda* is modelled upon Kṛṣṇamiśra's *Prabodhacandrodaya* and similar plays. It is ascribed to the author's patron, Ānandarāyamakhin, the son of Nṛsiṃharāyamakhin and grandson of Gaṅgādhamakhin. Nṛsiṃharāya, of Bhāradvājagotra, was a minister at the court of Ekojī of Tanjore (1676–1683). Tryambakarāja, his younger brother, was a minister of Ekojī, Śāhajī (1684–1710) and Serfojī (1711–1728). Ānandarāyamakhin,³⁹³ who was a minister at the courts of Śāhajī, Serfojī and Tukoḥī, also called Tulajā (1729–1735),³⁹⁴ died during the last year of Tukoḥī's reign.

The *Jīvānanda* was written during the reign of Śāhajī and staged for the first time during a festival in honour of Śiva.³⁹⁵

Vidvaduṇavilāsa

Vidvaduṇavilāsa, pupil of Siddhivardhanopādhyāya Gaṇi of the Kharataragaccha, wrote his *Guṇayogaprakāśa* in 1717.³⁹⁶

Viśrāma

Viśrāma, pupil of Pītāmbara, was the author of the *Vyādhinigraha*.³⁹⁷

Contents

The *Vyādhinigraha* consists mainly of a collection of prescriptions against a large number of diseases, preceded by a maṅgala, addressed to the author's guru and iṣṭadeva, and two verses on diagnosis and treatment in general.

The diseases dealt with are: jvara (4–38), atisāra (39–52), pravāhikā (53–55), grahaṇī (56–62), arśas (also called harṣa) (63–68), kṛmi (69–70), śopha (71–75), mūtrakṛcchra (76–85), mūtrarodha³⁹⁸ (86–89), prameha (90–94), aśmarī (95–101), vātarakta (102–104), ajīrṇa and viśūcikā (105–109), mandāgni (110–114), gulma (115–121), pāṇḍuroga (122–124), kāmālā (125–130), hāridraka (131–133), kuṣṭha

(134–141), sidhma (142–143), pāmā (144–145), dadru (146–147), pādasphuṭana (148), baddhakoṣṭha³⁹⁹ (149–152), śvayathūdara (153–159), plīhan (160–162), jalodara (163–165), raktapitta (166–171), pradara (172–177), garbhaparisaṛva (178), garbhapāta (179–180), naṣṭapuṣpa⁴⁰⁰ (181–182), raktasrāva in pregnant women (183), yonīśūla (184–187),⁴⁰¹ stanapīḍā⁴⁰² (188–189), yonīśūla (190–191), sūtikāroga (192–196), kṣaya (197–201), kāsa (202–214), śvāsa (215–222), hikkā (223–227), chardi (228–231), śūla (232–235), arocaka (236–237), tṛṣṇā (238–243), anidrā⁴⁰³ (244–245), mūrchā and tandrā (246–248), dāha (249–251), apasmāra⁴⁰⁴ (252–259), unmāda⁴⁰⁵ (260–261), ardita (262–264), dhanurvāta (265–266), śītāṅgaroga (268–270), āmavāta (271–274), rāndhāṇa (275–278), sandhivāta (279–283), vātaroga (284–304), amlapitta (305–307), visarpa (308–310), vraṇa (311–313), nāḍīvraṇa (314–315), visphoṭa (316), dagdhapīḍā⁴⁰⁶ (317–318), karṇamūlagranthi⁴⁰⁷ (319–320), karṇaka⁴⁰⁸ (321–322), śastraghāta⁴⁰⁹ (323–326), saptapuṭa, hoḍikā and copāṭikā (327–337), cipikā or cipi and sadyovraṇa (338–340), nāsura (341), snāyuroga (342), ślīpada and valmīka (343–345), arbuda and rasolikā (346–349), gaṇḍamālā (350–352), lūtā (353–356), bhagandara (357–362), vidradhi (363–365), upadamśa (366–375), śitalā (376), ūrustambha (377–379), vicarcikā (380–382), ānāha (383–384), madhura(jvara) (385–387), sṭhāulya (388–389), āmbavāyu (390), loss of libido (391–393),⁴¹⁰ udāvarta (394–395), vyaṅga (396–397), khillaka (398), śīroroga (399–410), bhrūśaṅkhadoṣa (411), ardhaśīrṣa⁴¹¹ (412), nāsāroga (413–418), indralupta and other types of śīroroga (419–422), karṇaroga (423–426), oṣṭhadoṣa (427), dantaroga (428–429), jihvāroga (430–431), ghaṇṭikāroga (432–435), galaroga (436–439), mukharoga (440), svararoga (441–442), mukharoga (443–445), netraroga (446–456), and bālaroga (457–463).

The last part of the work is devoted to various subjects of general medical interest, some of which are: prakṛti (470–471), the eight branches of āyurveda (474–477), aṣṭa-parīkṣā (478),⁴¹² pañcakarman (479–481ab),⁴¹³ embryology (487–491), and anatomy (492–510).

Remarkable names of diseases are: āmbavāyu, cīpī, cipikā, copāṭikā, ghaṇṭikāroga,⁴¹⁴ hoḍikā,⁴¹⁵ khillaka,⁴¹⁶ madhura(jvara),⁴¹⁷ nāsura,⁴¹⁸ rāndhāṇa,⁴¹⁹ rasolikā,⁴²⁰ saptapuṭa,⁴²¹ and śītāṅgaroga.⁴²²

The term ḍambhana is repeatedly used (329, 331, 339) for agnikarman (cauterization).

Noteworthy items of the materia medica are bodāra (336), copacīnī (295), māstakī (368), and pārada (340).

Caraka is referred to once (177).

The author

Viśrāma mentions his name and that of his guru, Pītāmbara, at the end of the work. He also informs his readers that he belonged to the Āgamagaccha and lived in a town called Arjunapura in Kūrmadeśa.⁴²³

The author remarks that his treatise is based on various other works and the teachings of his guru.

The *Anupānamāñjarī* is sometimes ascribed to Viśrāma.⁴²⁴

Date

The *Vyādhinigraha* was completed in A.D. 1756/57.⁴²⁵

Yasavanta

Yasavanta wrote his *Vaidyacinātamaṇi* in 1792/93.⁴²⁶

Yogarātnākara

The anonymous *Yogarātnākara*⁴²⁷ is an elaborate and comprehensive compilation in verse.⁴²⁸

Contents⁴²⁹

Section one (pūrvakhaṇḍa): generalities (1–3), omina (3–4), the eightfold examination (aṣṭasthānirīkṣaṇa) of a patient (4–13),⁴³⁰ kālajñāna, on signs foreboding death (13–14), types of country (14), the doṣas (14–16), āma (16), the constitutions (17), weights and measures (18–21),⁴³¹ a nighaṇṭu (21–43), the span of life allotted to a patient (43–46), dinacaryā, rātricaryā, and ṛtucaryā (46–80), types of water (80–82), milk and other dairy produce (82–91), oils (91–93), honey (93–94), the sugarcane and its products (94–95), urines (96), groups of condiments and drugs (97–100), pharmaceutical preparations (101–109),⁴³² the purification (śodhana) and killing (māraṇa) of the eight dhātus (109–120), the upadhātus, ratnas, viṣas and upaviṣas, the processes to which mercury has to be subjected, and various related subjects (120–146), substitutes for medicinal substances which are obtainable with difficulty (147–150), emetic and purgative procedures (150–154), nasya (154), karmapūraṇa (154), bloodletting (154–155), some definitions (156–157), and the nidāna and treatment of diseases (157–910). Section two (uttarakhaṇḍa) deals with vājīkaraṇa (910–927), rasāyana (927–931), and anupānas (931–932).

A large number of sources are quoted by name:⁴³³ *Āśvinasaṃhitā* (522),⁴³⁴ *Baud-dhasarvasva* (366), *Bhaṭṭārakahariścandra* (515),⁴³⁵ *Bhāvaprakāśa* (185, 186, 724, 741, 753, 789, 812, 853), *Bheḍa* (199), *Bhoja* (617, 618, 619, 620, 635, 731, 744, 745, 854), *Cakradatta* (170, 403, 653), *Caraka* (150, 515, 517, 563, 606, 730, 764), *Carpaṭa* (9), *Cikitsādhīpa* (365),⁴³⁶ *Cikitsākalikā* (228, 319, 780), *Cikitsāsāra* (364, 365, 371, 376, 382, 386, 387, 389, 396, 398, 402, 403, 420, 428, 429, 715), *Dhanvantarīyamata* (282),⁴³⁷ *Gadanigraha* (248, 294, 327, 383, 446, 526, 540), *Gorakṣanātha* (377),⁴³⁸ *Hārīta* (493, 635), *Hemādri* (157),⁴³⁹ *Jaijāṭa* (606),⁴⁴⁰ *Kadamba* (376, 475),⁴⁴¹ *Kāśyapa* (529),⁴⁴² *Kāśyapagrantha* (297),⁴⁴³ *Kāśyapaśaṃhitā* (897), *Kṣīrapāṇi* (601), *Laghuyoga* (390, 410),⁴⁴⁴ *Lakṣmanotsava* (701), *Madanapāla* (382),⁴⁴⁵ *Mādhava* (869),⁴⁴⁶ *Mālatīmukura* (105),⁴⁴⁷ *Manthānabhairava* (280), *Nārāyaṇīya* (364, 365),⁴⁴⁸ *Nimi* (800, 801), *Rājamārtaṇḍa* (302, 397, 555), *Rājanighaṇṭu* (99), *Rasamañjarī* (415), *Rasārājākṣmī* (206, 249), *Rasaratnapradīpa* (357, 364, 366, 391, 397, 404, 415, 422, 426, 431, 480, 544), *Rasaratnasamuccaya* (483), *Rasārṇava* (275, 337), *Rasasindhu* (282), *Rasendracintāmaṇi* (279), *Ratnapradīpa* (293),⁴⁴⁹ *Rudratantṛa* (10),⁴⁵⁰ *Samgraha* (543),⁴⁵¹ *Samhitā* (598, 789),⁴⁵² *Śaṃkarākhyā* (371),⁴⁵³ *Sārasaṃ-*

graha (338, 382, 386, 389, 390, 395, 399, 453, 475, 478, 507, 705), *Śārṅgadharma* (107, 200, 201, 320, 353, 359, 380, 381, 386, 388, 389, 397, 413, 420, 451, 466, 467, 468, 477, 478, 487, 490, 496, 521, 548), *Suśruta* (many times), *Vāgbhaṭa* (150, 169, 229, 576), *Vaidyājīvana* (354, 355, 365, 370, 398, 403, 414, 487), *Vaidyālaṃkāra* (106), *Vaidyavilāsa* (330, 365, 370, 487),⁴⁵⁴ *Vaṅgasena* (347, 817, 863), *Videha* (168, 797, 798, 802), *Vīrasīṃhāvaloka* (327, 420, 453), *Viśvāmitra* (875), *Viṭhala* (429),⁴⁵⁵ *Vopadevakṛtsātaka* (489),⁴⁵⁶ *Vopadevaśata* (373, 380),⁴⁵⁷ *Vṛddhahārīta* (6),⁴⁵⁸ *Vṛddhavāgbhaṭa* (168, 170, 181), *Vṛnda* (243, 245, 293, 306, 355, 356, 364, 365, 371, 377, 395, 396, 402, 403, 409, 410, 420, 421, 425, 428, 430, 444, 452, 476, 477, 478, 483, 486, 488, 497, 511, 518, 522, 528, 532, 533, 534, 538, 540, 541, 555, 566, 579, 595, 610, 616, 701, 768, 842), *Yāmala* (12),⁴⁵⁹ *Yoga* (371, 389), *Yogarātnasamuccaya* (113, 199), *Yogarātnāvali* (106, 358, 388, 391, 451, 489, 568, 569), *Yogasāra* (54, 335, 338, 381, 387, 388, 390, 391, 467, 525, 541), *Yogaśata* (371, 376, 388, 397, 425, 446, 474), *Yogaśataka* (365),⁴⁶⁰ *Yogatarāṅginī* (293, 306, 331, 334, 335, 357, 365, 372, 383, 386, 387, 388, 389, 396, 397, 403, 420, 421, 426, 428, 430, 595, 740), and *Yogatattva* (332).

Edition f gives more references to sources than g. Sources added in f are: *Anaṅgaraṅga* (1474, = g, 923), *Bhāvaprakāśa* (1206, = g, 752; 1209, = g, 753–754; 461 1214, = g, 756; 1378, = g, 863; 1380, = g, 865; 1387, = g, 869; 1411, = g, 884; 1440, = g, 903; 1443, = g, 905; 1456, = g, 913; 462 1485, = g, 930),⁴⁶³ *Cakradatta* (1352, = g, 848), *Candrasena* (1047, = g, 654),⁴⁶⁴ *Caraka* (458, = g, 289), *Cikitsākalikā* (1484, = g, 929), *Gadanigraha* (969, = g, 606),⁴⁶⁵ *Hariścandra* (853, = g, 535),⁴⁶⁶ *Kadamba* (898, = g, 563–564), *Kṣīrapāṇi* (960, = g, 600), *Mādhava* (1360, = g, 853), *Rājamārtaṇḍa* (1001, = g, 627; 1003, = g, 628; 1408, = g, 882; 1473, = g, 923; 1483, = g, 929), *Rasarātnākara* (213, = g, 138), *Rasaratnapradīpa* (1343, = g, 842),⁴⁶⁷ *Sārasaṃgraha* (874, = g, 549),⁴⁶⁸ *Śārṅgadharma* (833, = g, 523),⁴⁶⁹ *Śivāgama* (202, = g, 131), *Suśruta* (1432, = g, 897), *Vāgbhaṭa* (897, = g, 563), *Vaidyājīvana* (278, = g, 177), *Vaidyavilāsa* (1212, = g, 756; 1403, = g, 879; 1421, = g, 891), *Vaṅgasena* (1309, = g, 820–821), *Videha* (1268, = g, 791), *Vīrasīṃhāvaloka* (463, = g, 292; 593, = g, 372),⁴⁷⁰ *Vopadevaśata* (702, = g, 446),⁴⁷¹ *Vṛnda* (278, = g, 177; 755, = g, 475; 472 755, = g, 475; 473 859, = g, 539; 1248, = g, 779), *Yoga* (706, = g, 448; 755, = g, 475),⁴⁷⁴ *Yogarātnāvali* (1249, = g, 779),⁴⁷⁵ *Yogasāra* (711, = g, 451; 476 1343, = g, 843), and *Yogatarāṅginī* (709, = g, 450; 713, = g, 452–453; 477 1207, = g, 753).

Sources, absent from the above lists, but mentioned in the *Yogarātnākara* according to other scholars are: *Ārogyadarpaṇa*, *Āśvinīkumārasaṃhitā*,⁴⁷⁸ *Līlāvati*,⁴⁷⁹ *Matīmukura*,⁴⁸⁰ *Navaratnamālā*, *Nirṇayasindhu*,⁴⁸¹ *Śaṃkaramata*,⁴⁸² *Yogacintāmaṇi*, and *Yogapradīpa*,⁴⁸³ *Rasasārasaṃgraha* and *Rasendrasaṃhitā*,⁴⁸⁴ *Lolimbārāja*,⁴⁸⁵ and *Nirṇayasindhu*.⁴⁸⁶ Atriḍeva⁴⁸⁷ claims that the nighaṇṭu of the *Yogarātnākara* quotes *Cakrapāṇidatta*'s *Dravyaguṇa*.

The verses of the *Yogarātnākara* on nidāna are usually those of *Mādhava*'s *Rugviniścaya*, with the addition of other ones from sources not mentioned by name in most cases.

Authors and works quoting from or referring to the *Yogarātnākara* are: *Āśubodha* and *Nityabodha* Senagupta's commentary on the *Rasaratnasamuccaya*, the *Āyurvedīya*

Khanijavijñāna, the *Bheṣajasaṃhitā*, Devasiṃha Viṭṭhal's *Bṛhadāsavārīṣaṃgraha*, Dharmadatta's *Tridoṣasaṃgraha*, Govindadāsa's *Bhaiṣajyaratnāvalī*, Gulrājśarmamiśra's *Siddhapravagālatikā* and Viśikhānupraveśavijñāna, Haridattasāstrin's commentary on the *Rasatarāṅgiṇī*, Hariprapanna's *Rasayogasāgara*, Hariśaraṇānanda's *Kūpīpa-kvarasanirmānavijñāna*, Karandīkar's *Nidānadīpikā*, Khare's commentary on the *Rasaratnasamuccaya*, Lakṣmīrāma's commentary on the *Siddhabhesajamaṇimālā*, Nirāñjanaprasāda Gupta's *Pāradasaṃhitā*, Rājeśvaradatta Miśra's *Svasthavṛttasamuccaya*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, the *Rasoddhāraṇa*, Priyavrat Śarmā's auto-commentary on the *Āyurvedadarśana*, Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍiparikṣā*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, and the *Rasāmṛta* and *Siddhayaogasamgraha* of Vaidya Yādavajī Trikamajī Ācārya. It was also used by the unknown author of the interpolated portions of Niścalakara's *Ratnaprabhā*.⁴⁸⁸ The *Yogarātnākara* is one of the sources of Āyadāsa Kumārasīṃha's *Kvāthamaṇimālā* and Viśvanātha Dvivedī's *Rasendrasambhava*.

Special features⁴⁸⁹

The *nighaṇṭu* part of the *Yogarātnākara* enumerates properties; synonyms are only occasionally given.⁴⁹⁰ Noteworthy substances described are: āgastyasīmba (24), bheṇḍī (22),⁴⁹¹ bṛhanmarīca (24),⁴⁹² gaurabākucī (24),⁴⁹³ kṣupaja marica (24), mahāpīlu (27),⁴⁹⁴ miṣṭatumbī (22),⁴⁹⁵ pañcabhṛṅga (98), rāmāhvayaphala (27),⁴⁹⁶ śākūṭa (24),⁴⁹⁷ śītāphala (27),⁴⁹⁸ śyāmalaśākūṭa (25),⁴⁹⁹ and tamākhu (30).⁵⁰⁰

The verses on *rasaśāstra* mention two opinions on the composition of the group of the metals (*dhātu*); the first list consists of seven metals: gold, silver, brass (*āra*, = *pittala*), copper, lead, tin, and *tikṣṇaka* (a kind of iron), to which by some mercury is added; the second list enumerates gold, silver, copper, tin, lead, brass (*rītikā*, = *pittala*), bell-metal (*ghoṣa*), and iron (109). Seven *upadhātus* are recognized: *abhraka*, *māksika*, *tāla*, *śilā*, *nīlāñjana*, *tutthaka*, and *rasaka*. Nine major poisonous substances are mentioned: *kālākūṭa*, *vatsanābha*, *śṛṅgaka*, *pradīpana*, *hālāhala*, *brahmaputra*, *hāridra*, *saktuka*, and *saurāṣṭrika* (142); the seven minor poisons are: *arkakṣīra*, *snūhīkṣīra*, *lāṅgalī*, *karavīraka*, *guñjā*, *ahipheṇa*, and *dhattūra* (143).

The *Yogarātnākara* contains a long list of substitutes for drugs which are difficult to procure (147–150).

The order of the diseases agrees with the *Mādhavanidāna*. Diseases added are: one series of thirteen *saṃnipāta* fevers, namely *sandhika*, *antaka*, *rugdāha*, *cittavibhrama*, *śītāṅga*, *tandrika*, *kaṇṭhakubja*, *karṇaka*, *bhugnanetra*, *raktaṣṭhivīn*, *pralāpaka*, *jihvaka*, and *abhinyāsa* (160–162);⁵⁰¹ a fever called *mantharajvara* (214–215);⁵⁰² *jvarātisāra* (233–239); *pādaṇṭaka* (439); *ūrdhvavāta* (440); *śītavāta*, *sparśavāta*, and *raktavāta*⁵⁰³ (441); *urograha* (535); *bahumūtrameha* (polyuria; 576–577); *vardhma* (611); *agnidagdha* (654–656); *candrakavraṇa* (672);⁵⁰⁴ *pūtiprameha* (672);⁵⁰⁵ *snāyuka* (716–718); *śītālā* (724–727);⁵⁰⁶ *somaroga* and *mūtrātisāra* (843–845). *Phiraṅgaroga* is not described separately, but is included in the group of diseases called *upadāṃśa*.⁵⁰⁷

The formula of *khaṇḍakūṣmāṇḍaka* (308) does not agree at all with that of the *Bhāvaprakāśa*.⁵⁰⁸ The chapter on *galagaṇḍa*, etc., contains a verse, ascribed to Bhoja, on types of *granthi* which are incurable or difficult to cure (619) that is already found

in Gayadāsa's commentary on the *Suśrutasamhitā*.⁵⁰⁹ The recipe of *puṣyānugacūrṇa* (841) differs slightly from that found in the *Carakasamhitā*.⁵¹⁰

The description of the *yoniroga* called *udāvartā* (845) differs from that in the *Carakasamhitā*;⁵¹¹ the *aṇḍinī* type (846) corresponds to the *phalinī* type of the *Suśrutasamhitā*.⁵¹² The chapter on *yoniroga* mentions that a daughter is born from the left *nāḍī* of the female reproductive system, a son from the right *nāḍī* (848). The formula of *phalaghṛta* (848) differs very much from that present in the *Aṣṭāṅghṛdaya* and agrees with that found in the *Bhāvaprakāśa*.⁵¹³ The chapter on *yoniroga* also contains prescriptions against infertility in women (847–849), as well as contraceptive and abortifacient formulae (849–850),⁵¹⁴ recipes which tighten the vagina (851),⁵¹⁵ recipes effective against *yonidāha* (a burning sensation in the vagina) (851),⁵¹⁶ etc.

The chapter on *stṛīroga* describes that parturition may be impossible due to contraction (*saṃkoca*) of the birth channel (*garbha*), caused by *vāta* (861).⁵¹⁷ The same chapter leaves the treatment of *mūḍhagarbha* (malpositions), even the surgical interventions, to experienced midwives (862–863).⁵¹⁸ Some verses on the treatment of *mūḍhagarbha* have been borrowed from *Vaṅgasena* (863–864).⁵¹⁹ The *Yogarātnākara* advises pressing of the vaginal canal just after delivery, in order to prevent the entry of *vāta* (864). The employment of poultices (*upanāha*) is recommended in diseases of the breasts (*stanaroga*) (869), although this type of treatment is said to be contra-indicated in most *āyurvedic* treatises.⁵²⁰ The chapter on *kṣīradoṣa* and its treatment⁵²¹ has a long list of articles of diet, patterns of behaviour, etc., which should be recommended to a pregnant woman, followed by a series of unwholesome things (871).⁵²² Prescriptions against the evil effects of overuse of mercurial compounds are also found in the treatise (925–927).

The verses on therapy contain both *āyurvedic* recipes and *rasauśadhas*.⁵²³

Some new formulae may be found in the *Yogarātnākara*: *goṣṭurādiguṇī* (568),⁵²⁴ *candraprabhāguṇī* (568),⁵²⁵ *bālaharīṭakīyoga* (671),⁵²⁶ *mahākṣāraguṇī* (672),⁵²⁷ *pūgādiyoga* (672),⁵²⁸ and *kadalīkandaghṛta* (844).⁵²⁹

Verses on *pathyāpathya* are found at the end of the sections on treatment.

Many formulae of *pākas* are present in the *Yogarātnākara*.⁵³⁰

Noteworthy medicinal plants and substances prescribed are: *bhīmasenakarpūra*,⁵³¹ *bhūpārnīkā* (461),⁵³² *bhūṣarkarā* (461),⁵³³ *bhūtāṅkuṣa* (461),⁵³⁴ *copacīnī* (671),⁵³⁵ *gaṅgāvatī* (461), *gr̥dhramahīruha* (460),⁵³⁶ *heru* (460),⁵³⁷ *kabāba* (691), *karahāṭikā* (135),⁵³⁸ *kāruñjī* (461),⁵³⁹ *kevaṇī* (460),⁵⁴⁰ *kuñjarikā* (460),⁵⁴¹ *kusari* (460),⁵⁴² *madhupuṣpikā* (461),⁵⁴³ *mrgakhurī* (461),⁵⁴⁴ *murdāḍaka* (672),⁵⁴⁵ *nepatī* (461),⁵⁴⁶ *paṇḍula* (460),⁵⁴⁷ *phalā* (461),⁵⁴⁸ *picchalikā* (460),⁵⁴⁹ *poṭa* (466),⁵⁵⁰ *rasakarpūra*,⁵⁵¹ *rāyapurī* *śarkarā*,⁵⁵² *sākuraṇḍa* (461),⁵⁵³ *sauraka* (672),⁵⁵⁴ *śīvetara* (460),⁵⁵⁵ *śvetapuṣpa* (205),⁵⁵⁶ *vaiṣṇavikā* (461),⁵⁵⁷ *vāsānī* (460),⁵⁵⁸ and *virojā* (672).⁵⁵⁹

The author

The identity of the author remains unknown. According to some he must have been a resident of southern India since most of the MSS are found there and the *Yogarātnākara* is still much in use in *Mahārāṣṭra*. The author's name was *Mayūrapāda Bhikṣu* according to some Indian scholars.⁵⁶⁰

Date

The quotations from the *Vaidyavilāsa* by Raghunātha Paṇḍita, composed in A.D. 1697, and the existence of a MS, dating from A.D. 1746,⁵⁶¹ prove that the *Yogarātnākara* was compiled during the first half of the eighteenth century. The earliest author to establish this date was S.L. Katre,⁵⁶² P.K. Gode⁵⁶³ assigned the work to the period 1650–1725 on account of the quotation of Kamalākara's *Nirṇayasindhu*, composed in 1612,⁵⁶⁴ the verses on tobacco,⁵⁶⁵ and the MS dating from 1746. P.V. Sharma regards the work as having been written towards the end of the seventeenth century because it quotes Lolimbarāja and Trimalla's *Yogatarāṅgiṇī*.⁵⁶⁶ The most appropriate date for its composition is A.D. 1676 according to N. Saxena.⁵⁶⁷ The *Yogarātnākara* is regarded as dating from the eighteenth century by Atrideva⁵⁶⁸ and S. Upadhyaya.⁵⁶⁹

The *Yogarātnākara* should not be confused with another medical work of the same title, written in caupāi verse in old Gujarātī by a Jain author, called *Nayanaśekhara*, pupil of Jñānaśekhara, in 1633 or 1680.⁵⁷⁰

Chapter 4

Nineteenth-century authors and works

ABHIDHĀNACANDRIKĀ by Bhīmasena. Other works by the same author are a *Sūpaśāstra* and the *Vaidyabhūṣaṇā*.

The *Abhidhānacandrikā*¹ is a glossary of medical terms; its preface is to a great extent taken from the *Dhanvantarīyanighaṇṭu*.

The *Sūpaśāstra* is a treatise on cooking.²

The *Vaidyabhūṣaṇā* appears to be a comprehensive medical treatise.³

The *Vaidyabodhasaṃgraha* of a Bhīmasena may or may not be by a different author.⁴

Bhīmasena wrote his works in the second half of the nineteenth century. He was highly respected by Kṛṣṇa Rāja Wodeyar III, king of Mysore, who was placed on the throne by the British in A.D. 1799 and who died in 1868. Bhīma was also patronized by Kṛṣṇa Rāja's son, Cāmarāja Wodeyar.⁵

ABHINAVANIGHAṆṬU, compiled by Dattarām Nārāyaṇadatta Caube, son of Dattarām.⁶ The subject matter is arranged in twenty-four chapters (*varga*) and an appendix (*pariśiṣṭa*). Chapter one deals with pharmacology in general; chapters two to twenty-four describe medicinal substances, their names and their properties, mainly along the lines of the *Bhāvaprakāśanighaṇṭu*; the appendix, called *Yūnānī Dravyaguṇasaṃgraha*, is devoted to drugs borrowed from Islamic medicine.⁷

The author was a resident of Mathurā.⁸

ĀGNEYĀYURVEDAVYĀKHYĀ by Gaṅgādhara.⁹

AJĪRṆAMAṆJARĪ by Dattarāma,¹⁰ a short monograph on disorders of digestion (*ajīrṇa*).

The benedictory verses are addressed to Dhanvantari and Kṛṣṇa. The treatise begins with the statement that *ajīrṇa* is the main cause of all diseases; it proceeds with its *nidāna* (4–5),¹¹ its definition (6) and a description of its six varieties (7–13).¹² One verse (14) is devoted to the general treatment of the four chief varieties, two verses (15–16) are about the number of days required for *ajīrṇa*, caused by some specified articles of diet, to disappear when dietary restrictions are observed.¹³ Thirty-two verses (17–48) deal with *ajīrṇa* brought about by a long series of particular substances and its treatment by prescribing substances considered to be counteractive. Thirteen verses (49–61) are about ways of treating various discomforts; the preparation of *śukta* and *veśāvāra* is also described (58–60) in this section of the work. The treatise ends with the statement

(62) that the author, Dattarāma, compiled the *Ajīrṇamañjarī* from the words of various sages.¹⁴ A *pariśiṣṭa* of nine verses contains some compound formulae. A part of the *laṣṇakalpa* from the *Kāśyapaśaṃhitā* is appended at the end.

The only authority quoted by name is *Kāśyapa* (49).

A comparison with *Kāśinātha's* *Ajīrṇamañjarī* learns that more than half of *Dattarāma's* verses were borrowed from it.

The description of *ajīrṇa* caused by particular substances and its treatment by means of specified other substances is not found in the classical *śaṃhitās* and appears rather late in *āyurvedic* literature.¹⁵

A noteworthy article of diet mentioned in the *Ajīrṇamañjarī* is *cīnārūka* (46).¹⁶

No particulars are known about the author.

The treatise was completed in 1882/83.¹⁷

*ANUPĀNATARANĠINĪ*¹⁸ by *Raghunāthaprasāda*.

The work consists of 522 verses, arranged in seven chapters (*vīci*), and is composed in the form of a dialogue between a husband and his beloved wife. The latter is the receiver of teachings about *anupānas* to be taken in conjunction with inorganic medicinal substances prepared by means of alchemical processes. These substances are the *dhātus* (chapter one), *upadhātus* (chapter two), mercury (*rasa*) and its compounds (chapter three), sulphur (*gandhaka*) and its compounds (chapter four), the *uparasas* (chapter five), and the *ratnas* (chapter six). Chapter seven is on diverse *anupānas*. Alchemical topics, such as the *śodhana* and *māraṇa* of the *dhātus*, etc., and the mythical origin of mercury, are also dealt with. The preparation of *rasakarpūra*, to be used in the treatment of syphilis, is described in chapter three (76–84).

The author employs, in order to designate *śūla*, the unusual term *śivaśāstrābhidhagada* (3.69).¹⁹ Noteworthy words are also *varakha* (1.26 and 2.55)²⁰ and *gulkanda* (6.21).²¹

The *Anupānataranṅinī* is quoted in the *Pāradasaṃhitā*.

At the end of the work the author gives his genealogy: *Bālaśarman*, a *brāhmaṇa* of *Kānyakubja* lineage, living on the banks of the *Bhāgīrathī*, i.e., the *Ganges* – *Vireśvara* – *Kāśinātha* – the physician *Govardhana* – the physician *Tāpīrāma* – *Sītārāma* – *Raghunāthaprasāda* (7.30–34).²²

The author was probably active during the second half of the nineteenth century.²³

ĀROGYADARPAṆA, compiled by *Jagannātha Śarman*.²⁴

ĀROGYAKALPADRUMA by *Kaikkulānnara Rāma Vāriyar* (1832–1896).²⁵ This treatise is a therapeutic manual in verse; its author is a poet who is well known in Kerala.²⁶

ĀROGYASTOTRA by *Gaṅgādhara*.²⁷

ĀRYAGṚHACIKITSĀ by *Vinodalāla Sena*.²⁸

AUŚADHASINDHULAHARĪ, compiled by *Kṛṣṇadāśavasumallika*.²⁹ The same author wrote a Bengali commentary on the *Mādhavanidāna*, called *Nidānārthacandrikā*.³⁰

AUŚADHIKALPALATIKĀ, compiled by *Bastīrāma*.³¹

ĀYURVEDADARPAṆA, compiled by *Nārāyaṇa Rāy* from *Caraka*, *Suśruta*, *Vāgbhaṭa*, *Hārīta* and other authorities.³²

ĀYURVEDAPARIBHĀṢĀ, compiled by *Śāradācaraṇa Senagupta* and *Pyārīmohana Deva*.³³

ĀYURVEDĀRTHACANDRIKĀ, compiled by *Śyāmācaraṇa Gupta*.³⁴

ĀYURVEDAŚABDĀRṆAVA, compiled by *Gaṅgāprasāda Śarman*, son of *Guru Dīnalāla Śarman* of *Dvivedipura*. This work is a glossary of *materia medica*, compiled from Sanskrit authorities and with explanations in Hindi.³⁵

ĀYURVEDASAMGRAHA by *Gaṅgādhara*.³⁶

ĀYURVEDASAMGRAHA, compiled by *Devendranātha Senagupta* and *Upendranātha Senagupta*. This work consists of a collection of extracts from the treatises of *Caraka*, *Suśruta* and *Vāgbhaṭa*, and from the *Rasaratnākara*, *Rasaratnasamuccaya*, *Kūṭamudgara*, *Nāḍīvijñāna*, etc.³⁷

ĀYURVEDASĀRASAMGRAHA, compiled by *Gopālacandra Senagupta*.³⁸

ĀYURVEDASUDHĀKARA by *Raghunāthaprasāda Sukala*.³⁹

*ĀYURVEDAVIJÑĀNA*⁴⁰ by *Vinodalāla Sena*.⁴¹

This comprehensive treatise, written in verse and prose, is divided into four sections: *sūtrasthāna* (78 chapters), *śārīrasthāna* (15 chapters), *dravyasthāna* (41 chapters) and a *pariśiṣṭa*, and *nidāna-cikitsasthāna* (87 chapters).

The *sūtrasthāna* deals with the descent of *āyurveda* (*āyurvedāvatarāṇa*), technical rules (*paribhāṣā*), *pañcakarman*, the preparation of caustics (*kṣārapāka*), bloodletting (*raktasrāva*), the examination of a patient (*rogi-parīkṣā*), blunt and sharp instruments (*yantraśāstrādivarṇana*), the purification and killing of the *dhātus* (*dhātuśodhanamāraṇa*), etc.

The *śārīrasthāna* is about anatomy and physiology; the *dravyasthāna* is concerned with *materia medica*.⁴²

Chapter one of the *nidāna-cikitsasthāna* is devoted to general concepts related to pathology, chapters two to eighty-two are concerned with the *nidāna* and treatment of diseases. These diseases are arranged in a way that completely differs from *Mādhava's* order, while many new diseases are described too. The order of chapters two to twenty-five may serve as an example: *jvara*, *viṣamajvara*, *jvaracikitsā*, *jvarātisāra*, *plīhan*, *yakṛdroga*, *pāṇḍu-kāmalā-halīmaka*, *śoṭha*, *udara*, *raktapitta*, *rājayakṣman*, *kāsa*, *svarabheda*, *hikkā-śvāsa*, *hṛdroga*, *urastoya*, *krimi*, *agnimāndya*, *arocaka*, *atīsāra*, *grahāṇī*, *amlapitta*, *śūla*, *gulma*.

The subjects of chapters eighty-three to eighty-seven are: *apamumūrṣu*, *vīryasta-*

mbha, rasāyana, vājīkaraṇa, and karmavipāka. The treatise ends with a short pariśiṣṭa. The treatments described are of a mixed type: āyurvedic prescriptions and rasayogas are found side by side.

The influence of western medicine is clearly discernable in the Āyurvedavijñāna.

Sources referred to in the introductory part of the work⁴³ are: Bhāvaprakāśa, Cakradatta, Caraka, Hārīta, Rasaratnākara, Rasendracintāmaṇi, Suśruta, Vāgbhaṭa, and Vaṅgasena.

Sources and authorities quoted or referred to in the body of the treatise are: Ātreya (II: 376), Bhāvaprakāśa (II: 95), Bhoja (II: 432, 551, 558), Caraka (II: 464, 504), Dakṣiṇāmūrtisaṃhitā (II),⁴⁴ Kārtika (II: 472), Kāśyapaśaṃhitā (II: 607), Śabdakalpadrūma (II: 196), Śākteyagrantha by Dhanvantari (II: 196), Śātātapa (II: 632), Suśruta (II: 24, 94, 97, 217, 464, 488, 504, 512, 560), Uraḥbra (II: 376), and Videha (II: 479).⁴⁵

The Āyurvedavijñāna is one of the sources of Āryadāsa Kumārasimha's Kvāthamaṇimālā, the Bheṣajasaṃhitā, and Devasimha Viṭṭhal's Bṛhadāsavārī-ṣṭasaṃgraha; it is quoted in the Pāradasaṃhitā and Rasayogasāgara.

Dissection is recommended for anatomical studies. The circulation of the blood is described.⁴⁶ The contraction of the pupil caused by opium and its dilatation by Datura seeds are known to the author. Percussion (abhighātaparīkṣā) and auscultation (śravaṇaparīkṣā) are described, but not the stethoscope. The number of bones is said to be 246, in agreement with Uraḥbra, who is quoted on the subject. The terms dhamanī and nāḍī are used to designate arteries; a lymphatic vessel is called a srotas and a nerve a snāyu. The functions of heart and lungs and the digestive processes are described in agreement with western medicine, as well as the urinary tract and the reproductive organs.⁴⁷

Noteworthy substances mentioned in the dravyasthāna are:⁴⁸ amaravallī,⁴⁹ antamala,⁵⁰ dhūnarāja,⁵¹ kaṭuvīrā,⁵² mahātikṭā,⁵³ majjaphala,⁵⁴ picchilā,⁵⁵ pītākū-smāṇḍa,⁵⁶ pītāmūlī,⁵⁷ pīvarī,⁵⁸ prajāvatī,⁵⁹ sahāsāra,⁶⁰ saṃvidā mañjari,⁶¹ śārdūlakanda,⁶² śītabhīja,⁶³ śrāvīkā, śrīvāsasāra,⁶⁴ sudhāmūlī,⁶⁵ surapriya,⁶⁶ svarṇapattrī,⁶⁷ śyāmabhīja,⁶⁸ śyāmaparṇī,⁶⁹ and viśalyakaraṇī.⁷⁰

The dravyasthāna also describes some recently introduced oils,⁷¹ such as dīpyakataila, jātīphalataila, khasabījātaila, lavaṅgataila, nikumbhataila, rālatāila, vātādatāila,⁷² and yakṣadrumataila.

Special features of the nidāna-cikitsitasthāna are:⁷³ three series of thirteen saṃnipāta fevers;⁷⁴ the chapter on plīhan (6) adds verses, which may derive from the author himself, to those found in the Mādhavanidāna; the chapter on diseases of the liver (yakṛdroga; 7) may have been written by the author and describes, for example, the surgical treatment of a liver abscess (61); the chapter on rājayakṣman (10) includes the treatment of a disorder called kaṇṭhakṣata; the chapter on hṛdroga (16) describes a series of new diseases: āvaraṇika, kauṣṭhika, prṭhuka, āyānikā, parīkṣaya, medaḥ-sūtra, and vikṣepikā;⁷⁵ new terms employed in the chapter on diseases of the heart are hṛdvepathu or koṣṭhasaṃvepana (a kind of arrhythmia) and hṛtkoṣṭhapesīsūtra (the muscle fibres of the heart); the description of vaccination against smallpox in the chapter on masūrīkā (31) agrees with a quotation in the Śabdakalpadrūma from

a Śākteyagrantha by Dhanvantari;⁷⁶ the variety of masūrīkā, called romāntikā, is described according to some unknown source (a granthāntara); śītalā is not mentioned in the chapter on masūrīkā; śvitra is described in detail in the chapter on kuṣṭha (33); a description of aupasargikopadaṃśa, i.e., syphilis, is found in the chapter on upadaṃśa (38); aupasargikopadaṃśa is also called pāpopadaṃśa and viṣopadaṃśa, but the term phiraṅgaroga is absent; the first stage of syphilis is called mukhya, the later stages are designated by the term gaṇopadaṃśa; vradhna⁷⁷ is described in the chapter on vṛddhi (45); the chapter on vātavyādhi (47) contains a new disease, āgantuja pakṣāghāta;⁷⁸ the chapter on mūrṇchā and related disorders (53) describes śaiśavasamnyāsa,⁷⁹ not known from other treatises; the chapter on women's diseases (stṛīroga; 79) contains descriptions of some new diseases: raktamādrī, śaṣṭhībādhaka, aṅkura, jalakumārado-ṣa, yonyākṣepa,⁸⁰ yonyaṅkuravṛddhi or -saṃvṛtti,⁸¹ jarāyuroga,⁸² and aṇḍādhāragada; the chapter on vīryastambha (84) consists of prescriptions which are thought to delay ejaculation during intercourse; the chapter on karmavipāka (87) consists of quotations from Śātātapa.

The nidāna-cikitsitasthāna describes a series of diseases,⁸³ together with their treatment, which are also found in Govindadāsa's Bhaiṣajyaratnāvalī: urastoya (chapter 17),⁸⁴ pāradavikāra (chapter 40),⁸⁵ smaromāda (chapter 51),⁸⁶ gadodvega or apadārthagada (chapter 52),⁸⁷ yoṣāpasmāra (yoṣāpasmārādhikāra of chapter 54 on apasmāra),⁸⁸ tattvonmāda (chapter 56),⁸⁹ acalavāta (chapter 57),⁹⁰ khañjanikā (chapter 58),⁹¹ tāṇḍavaroga (chapter 59),⁹² snāyuśūla (chapter 60),⁹³ klomaroga (chapter 61),⁹⁴ vṛkkāmaya (chapter 62),⁹⁵ bahumūtra,⁹⁶ madhumeha,⁹⁷ somaroga and mūtrāsīsāra (chapter 67),⁹⁸ śukrameha,⁹⁹ aupasargikameha,¹⁰⁰ ojomeha,¹⁰¹ and lasikāmeha (chapter 68),¹⁰² dhvajabhaṅga (chapter 69),¹⁰³ śīrṣāmburoga (76),¹⁰⁴ mastiṣkavepana¹⁰⁵ and mastiṣkacayāpacaya (chapter 77),¹⁰⁶ amśughāta¹⁰⁷ and skhālitya (chapter 78),¹⁰⁸ yonikaṇḍū¹⁰⁹ and aṇḍādhāragada or ḍimbādhāragada (chapter 79),¹¹⁰ and apamumūṛṣu (chapter 83).¹¹¹

Both āyurvedic recipes and rasayogas are found in the verses on treatment. References to formulae described in volume I are frequent.

Noteworthy substances prescribed are: kirāva (537),¹¹² nallakī (536), pītāmūlī (48, 49, 57, 59), and tāmrāmūlī (50).¹¹³ Opium (ahipheṇa, bhogipheṇa, phaṇipheṇa, etc.) is rather frequently mentioned.¹¹⁴

The author states at the end of the work that he was a grandson of the physician Nityānanda and a son of Rājakiśora; he adds that he was a resident of Ambikā.

The author informs us at the end of his work that it was printed in 1883.¹¹⁵

ĀYURVEDĪYADRAVYĀBHIDHĀNA by K.B. Lāl Sengupta.¹¹⁶

ĀYURVEDĪYAKAUTUKAVILĀSA, compiled by Rāmamohana Vidyāvinoda.¹¹⁷

ĀYURVEDĪYAPARIBHĀṢĀ by Gaṅgādhara.¹¹⁸ This work, consisting of 314 verses and prose passages, arranged in seven chapters (prakaraṇa), deals with the following subjects: (1) weights and measures (māna), (2) the rules to be applied when the parts of a plant to be used, the quantities and ratios of ingredients, etc., are not explicitly mentioned in recipes (anuktaprakāśana), (3) details on the preparation of a kalka, etc., (4)

the elucidation of obscure points in the preparation of medicines (avyaktavivecana), (5) rules for Π pāka, (6) deliberations on the prakṣepa (ingredients to be added to a compound medicine), and (7) the elucidation of subjects merely hinted at in medical treatises (leśoktaviveka).

Works and authors quoted are: Carakasamhitā, dharmasāstra, Ṛḍhabala, Manusmṛti, smṛtisāstra, Suśrutasaṃhitā, Taittirīyopaniṣad, Viṣṇusaṃhitā, and Yājñavalkyasaṃhitā.

ĀYUSTATTVAVIJÑĀNA by Vinodalāla Sena.¹¹⁹

BHAIŚAJYA-DHANVANTARI, compiled by Candrakāntadāsa Kavirāja.¹²⁰

BHAIŚAJYARĀMĀYAṆA by Gaṅgādhara.¹²¹

BHAIŚAJYARATNĀVALĪ, compiled by Ravidatta Śāstrin, son of Śivasahāya, of Beri.¹²²

BHAIŚAJYAVIJÑĀNA, compiled by Īśānacandra Vandhyopādhyāya.¹²³

BHĀSKARODAYA by Gaṅgādhara.¹²⁴

The BRHANNIGHAṆṬURATNĀKARA,¹²⁵ compiled by Dattarāma,¹²⁶ is a very large medical treatise of an encyclopaedic nature.

Volume one consists of an introduction and nineteen chapters (adhyāya). The introduction contains a maṅgalācaraṇa, the genealogy of the author, and verses on the position of āyurveda among the sciences.

Chapter one deals with definitions of āyurveda, the eight parts (aṅga) of āyurveda,¹²⁷ and the origin of āyurveda (āyurvedotpatti).

The first part of the story about the origin of āyurveda, up to the appearance of Suśruta, has been taken from the Bhāvaprakāśa. Added to it by Dattarāma are: the appearance of Vāgbhaṭa; an enumeration of the eighteen āyurvedic saṃhitās by Hārīta, Suśruta, Parāśara, Bhoja, Bheḍa, Bhṛgu, Agniveśa, Caraka, Cyavana, Agastī, Vārāha, Vāgbhaṭa, Nārāyaṇa, Nārasimha, Ātreya, Atri, Śaśin, Śiva, and Bhāskara;¹²⁸ a series of authors and works on rasaśāstra;¹²⁹ the Rasaratnākara by Siddha Nityanātha and the Rasendracintāmaṇi by Tuṅṭūnīnātha; the Rugviniścaya by Mādhavakara; the names of a series of commentators: Bhaṭṭāra, Jejjāta, Gadādhara, Vāpyacandra, Śīcakrapāṇi, Bakula, Īśvarasena, Īśāna, Kārttika, Sukīra, Sudhīra, Maitreya, and Mādhava;¹³⁰ Cakrapāṇi's Cakradatta; the Nighaṇṭurāja by Nārasimha from Kaśmīr; Bhāvamīśra and his Bhāvaprakāśa.

Chapter one ends with verses on basic concepts.

Chapters two, three and four are almost identical with chapters two, three and four of the Sūtrasthāna of the Suśrutasaṃhitā and bear the same titles. Chapters five, six and seven, also taken from the Suśrutasaṃhitā, agree with chapters one, two and three of its Śārīrasthāna, but some new material has been added to the text of Suśruta. Chapter eight is based on chapter four of the Śārīrasthāna of the Suśrutasaṃhitā, but contains a large number of additions which betray the influence of western anatomy. Chapters nine to fourteen are, apart from some extra material, the same as chapters five to ten of the Śārīrasthāna of the Suśrutasaṃhitā; chapters fifteen to nineteen are the same as chapters five, seven, eight, nine, and twenty-five of the Sūtrasthāna of the Suśrutasaṃhitā.

Volume two contains chapters twenty to thirty-four. Chapters twenty to twenty-four are practically the same as chapters eleven to fifteen of the Sūtrasthāna of the Suśrutasaṃhitā. Chapter twenty-five is partially the same as chapter twenty-one of Suśruta's Sūtrasthāna. Chapters twenty-six to twenty-nine contain the complete text of the Caryācandrodaya, a work on ṛtucaryā, dinacaryā and rātrīcaryā, compiled by Dattarāma and also published as a separate work.¹³¹ Chapter thirty is identical with chapter ten of the Sūtrasthāna of the Suśrutasaṃhitā. Chapters thirty-one and thirty-two are on prognostic signs (dūtavarṇana; śakunavarṇana). Chapter thirty-three consists of a separate treatise, in 149 verses, on dreams and their meaning, the Svapnaprakāśikā. Chapter thirty-four contains Dattarāma's treatise on pulse-examination, the Nāḍīdarpaṇa;¹³² it is followed by twenty-three verses on the examination of the pulse according to the Yūnānī system and eighteen verses on the same subject according to western medicine.

Volume three has not been accessible to me.

Volumes four to six are devoted to diseases and their treatment. Their contents are for a very large part identical with those of volume two of the Nighaṇṭuratnākara. The verses on karmavipāka and astrology are different in a small number of instances.¹³³

Volumes seven and eight contain an extensive nighaṇṭu, the Śāligrāmanighaṇṭubhūṣaṇa, compiled by Śāligrāma. It describes the names and properties of a large number of medicinal substances in twenty-seven vargas and a paṇiṣṭa; the botanical, vernacular and English names are also recorded in most of the cases.

Sources, mentioned in volumes one, two, and four to six, are: Ātreya (II: 492), Bharadvājasamhitā (I: 98), Bhāvaprakāśa (I: 168), Bhoja (I: 245), Bhojanakutūhala (II: 646), Brahmāṇḍapurāṇa (II: 689), Brhatsamhitā (I: 98–99), Brhadayogatarāṅgiṇī (I: 59), Caraka (I: 136, 199 and 310; IV: 222), Hārīścandra (II: 541), Kṣemendra (II: 489), Madhukośa (II: 452), Manu (I: 107), Padmapurāṇa (IV: 221), Parāśara (V: 1), Saṃgraha (I: 114 and 160), Śārīgadharā (I: 169), Suśruta (I: 106), Vāgbhaṭa (I: 104, 111, 112, 118, 145, 165, 186, 205; II: 450, 493, 498), Vaidyasārasaṃgraha (II: 494 and 501), Vaiṣṇavāgama (I: 137), Varāhamihira (I: 100), Vṛddhāvāgbhaṭa (I: 177 and 317), and Yogārṇava (IV: 276).

Sources mentioned in the Śāligrāmanighaṇṭubhūṣaṇa are: Amarakośa (807), Ātreyasamhitā (35, 39, 42, 45, 47, 128, 247, 282, 400, 403, 492, 510, 538, 565, 572, 573–574, 583, 613, 616, 637, 678, 688, 845, 870, 890, etc.),¹³⁴ Bhaiśajyacikitsā (47, 87),¹³⁵ Bhāvaprakāśanighaṇṭu (passim), Dhanvantarinighaṇṭu (passim), Dravyacīhna (14),¹³⁶ Dravyaguṇa (826, 830), Dravyaguṇadīpikā (1021),¹³⁷ Gaṇanighaṇṭu¹³⁸ (45, 164, 234, etc.),¹³⁹ Hārītasamhitā (816, 818, 823, 833, 835, 843, 864, 899, 918, 934, 965, 966, 968, 969, 971–972, 981, 984, 994, 995, 996, 997, etc.), Kaiyadeva (164), Kośa (771), Laṅkānātha (1073),¹⁴⁰ Laṅkeśa (173),¹⁴¹ Madanapālānighaṇṭu or Madanavinoda (passim), Nighaṇṭucūḍāmaṇi (166), Nighaṇṭuratnākara (passim), Nighaṇṭusaṃgraha (208), Niruktaratnākara (26),¹⁴² Prayogāmṛta (34), Rājānighaṇṭu (passim), Rājavallābhanighaṇṭu (passim), Rasacandrikā (237, 736), Rasendrasārasaṃgraha (238), Ratnākara (759, 761, 763, 765, 767, 774, 793–794, 810, 902, 913, 925, 935, 938, etc.), Śivanighaṇṭu (155, 164, 196),¹⁴³ Śoḍhalanighaṇṭu (passim), Suśeṇa (258, 583, 864, 901, 994, 1089), Suśrutasaṃhitā (494, 498, 553, 599, 619, 769, 995, etc.),¹⁴⁴ Trikāṇḍaśeṣa (922), Vāgbhaṭa (814, 828, 831, 843, 858), Vaidyanigha-

ṇṭu (128, 132, 353, 813, 977), Vaidyajīvana (682), Vikāratimirabhāskara (129, 243, 257, 306),¹⁴⁵ Viṣṇudharmottara (771), Vṛddhasūruta (979), and Yuktikalpataru of Bhojarāja (791, 795).¹⁴⁶

The Bṛhannighaṇṭuratnākara is one of the sources of Āryadāsa Kumārasimha's Kvāthamaṇimālā, the Bheṣajasamhitā, and the Rasoddhātantra. The Śāligrāmanighaṇṭu(bhūṣaṇa) is quoted in Gulrājsarmamiśra's commentary on the Āyurvedaprakāśa and in the Rasadhātuprakāśa.

Some anatomical descriptions of chapter eight of volume one betray the influence of western anatomy.¹⁴⁷ The diseases dealt with are the same as in the Nighaṇṭuratnākara, but the seven types of śitalā and the hymn to Śitalā are omitted.

Noteworthy substances described in the Śāligrāmanighaṇṭubhūṣaṇa are:¹⁴⁸ ādityapatrā, four types of ahiphena (231–232: śveta-, kṛṣṇa-, pīta-, citravarna), ākarakarbha (155–156), two types of ākhukarṇī (478–480: brhaṭī and laghvī ākhukarṇī),¹⁴⁹ several types of ālu (942–946: raktālu,¹⁵⁰ rājālubheda, gajakarṇālu, mukhālu, kāsālu,¹⁵¹ phoṇḍālu, pānīyālu, nīlālu,¹⁵² śubhrālu; 954–955: śaṅkhālu,¹⁵³ kāsthālu,¹⁵⁴ madhurājālu, raktarājālu, śvetālu, kṛṣṇavanāluka, vanāluka), anannāsa (633),¹⁵⁵ āri (1236),¹⁵⁶ three types of ativiśā (219–220: śuklā, kṛṣṇā, aruṇā), two types of bhallātaka (222–225: bhallātaka and nadībhallātaka),¹⁵⁷ bhiṣaṭā (1252),¹⁵⁸ bhramaracchallikā (1236–1237),¹⁵⁹ bhūśimbikā (647),¹⁶⁰ two types of bījapūra (578–581: bījapūra and vanabījapūra), two types of bimbī (912–915: bimbī and tiktabimbī), cāha (1216–1217),¹⁶¹ six types of campaka (493–496: campaka, śveta-, nāga-, sultāna-, nīla-, bhūmicampaka),¹⁶² caṇḍālakanda (952),¹⁶³ candrikā (131–132: = candraśūra), cīḍā (27),¹⁶⁴ copacinī (153–155), three types of dantī (395–398: dantī, brhaddantī, bhadradantī), two types of devadāru (26–27: snigdhadāru and kāsthadāru),¹⁶⁵ ekavīra (1234–1235),¹⁶⁶ elīyaka (420),¹⁶⁷ eraṇḍacirbhīta (1246–1247: = vātakumbhaphala),¹⁶⁸ gaṅgāṭī (422),¹⁶⁹ three types of gholikā (865–866: gholikā = loṇī,¹⁷⁰ rāja- and kṣudragholikā), granthigobhī (1256),¹⁷¹ two types of hapuṣā (156–157: hapuṣā and svalpapalā hapuṣā), hastajodī (953),¹⁷² five types of hayāri (307–309: śveta, rakta, pāṭala, pīta, kṛṣṇa),¹⁷³ herambavṛkṣa (1244),¹⁷⁴ īṣadgola (1218–1219),¹⁷⁵ seven types of jambū (648–651: jambū, mahā-, kṣudra-, kāka-, bhūmi-, rāja-, jalajambū),¹⁷⁶ jhaṇḍu (518),¹⁷⁷ jhilla (1234),¹⁷⁸ jhullapuṣpa (1251–1252),¹⁷⁹ six types of kadālī (557–564: kadālī, āraṇya-, kāsthā-, suvarṇa-, mahendrakadālī, kṛṣṇā kadālī), kajūtaka (647–648),¹⁸⁰ three types of kāñcana (323–325: rakta, śveta, pīta), karalī (880–881),¹⁸¹ six types of karañja (336–340: karañja, mahā-, ghṛta-, guccha-, pūtikarañja, kaṇṭayukta karañja),¹⁸² six types of karkaṭī (893–896: karkaṭī, ervārūka, ṛṭīyākarkaṭī, aranyakarkaṭī, tikta-, cīnākarkaṭī),¹⁸³ seven types of karpūra (1–6: karpūra, potāśraya, īśāvāsa, himakarpūra, udayabhāskara, paṇakarpūra, cīnakarpūra), two types of kaṭabhī (700: kaṭabhī and śvetakaṭabhī), kaṭuvīrā (1219–1220),¹⁸⁴ five types of khadira (671–674: rakta- and śvetasāra khadira, viṭkhadira, laghu-, vallīkhadira),¹⁸⁵ four types of kharjūrī (569–572: kharjūrī, bhūmi-, piṇḍakharjūrī, sulemānī), kṛṣṇabīja (404),¹⁸⁶ kṣudrabadāma (1248),¹⁸⁷ kṣudraketakī (420–421),¹⁸⁸ kuraṇḍikā (1229–1230),¹⁸⁹ two types of lajjālu (456–457: lajjālu and viparītā lajjālu), māḍa (708),¹⁹⁰ mahākāya (859),¹⁹¹ mahārāṣṭrī (1222),¹⁹² makhāna (1232),¹⁹³ māvallī (1233),¹⁹⁴ māyāphala (1212), nāgajihvā (1250),¹⁹⁵ two

types of nārikela (565–568: nārikela and mohajāṭīyaka nārikela), five types of pāṭalā (265–267: pāṭalā, śveta, bhū-, kṣudrā, vallīpāṭalikā), patragobhī (1256),¹⁹⁶ four types of pippalī (116–123: pippalī, saimhalī, vanapippalī, markatī),¹⁹⁷ several varieties of pūgaphala (607–611: āndhrodbhava, campāvātībhava, romṭasaṃjñā, valgulagrāmaja, candāpurabhava, guhāgarodbhava, nailavadgrāmasambhūta), puṣpagobhī (1255),¹⁹⁸ rājagiri (1253),¹⁹⁹ rāmaphala (632),²⁰⁰ revaṭcīnī (1215),²⁰¹ sahasramūlikā (874),²⁰² sājaḍa (708),²⁰³ sājaka (821–822),²⁰⁴ samudraśoṣa (1239),²⁰⁵ sarpaḍamṣṭrā (1223–1224),²⁰⁶ sītāphala (631–632),²⁰⁷ sudhāmūlī (1219),²⁰⁸ svarṇapattribhī (403),²⁰⁹ tailakanda (952),²¹⁰ tamākhu (1217–1218),²¹¹ tejomantha (270),²¹² triparṇī (953),²¹³ several types of ṛṇa (373–377: ūṣala, ikṣudarbha, gomūtrikā, śīpikā, niḥśreṇikā, garamoṭikā, majjara, mṛgapriya, vaṃśapattī, manthānaka, dhenupriya, pallivāha, lavaṇatṛṇa, paṇyandhā, guṇḍa, vṛttaguṇḍa, caṇikā, guṇḍasīnī, śūlī), three types of tulasī (524–525, 530–531: śvetā and kṛṣṇā tulasī, āraṇyatulasī), tuvara (1245–1246),²¹⁴ three types of udumbara (658–661: udumbara, nadyudumbarikā, kākodumbarikā), two types of vaṃśa (361–363: vaṃśa and randhravaṃśa),²¹⁵ vanasā (1254),²¹⁶ two types of vṛddhadāru²¹⁷ (1238: vṛddhadāruka and phaṇḍī), three types of yāvanāla (819–821: dhavala, tuvara, śārada),²¹⁸ and three types of yavānī.

Dattarāma, who descended from a family of Māthuriya brāhmaṇas, gives in the introductory verses of the Bṛhannighaṇṭuratnākara the following information on his ancestors: he was the son of Kṛṣṇalāla, and grandson of Hariścandra; the latter was the youngest of the three sons of Ghāṣirāma, in his turn the son of Gopinātha.

Śāligrāma, the compiler of the Śāligrāmanighaṇṭubhūṣaṇa, was a Māthura vaiśya, of Candravarma and Āhlādagotra. At the end of the work he informs us of his genealogy: Bālamukunda – Govardhanadāsa – Hariyaśārāja – Gopālādāsa – Puruṣottamadāsa – Motīrāma – Padmanetra – Ghanaśyāmadāsa – Sītārāma; Śāligrāma was the son of Ānandarūpa, also called Khusālārāja, the youngest of the three sons of Sītārāma.

Śāligrāma was born in Murādābād in 1831/32. Besides the Śāligrāmanighaṇṭubhūṣaṇa, he also wrote the Śāligrāmauśadhasābdasāgara or Āyurvedīya Ausadhīkoṣa²¹⁹ and a rather large number of Hindī translations of Sanskrit medical works. In 1897/1898 he founded the Āyurvedoddhāraka dispensary in Murādābād.²²⁰

CARYĀCANDRODAYA²²¹ by Dattarāma, son of Kṛṣṇalāla.²²² This is a rather comprehensive treatise, for the greater part in verse,²²³ on ṛtucaryā (chapter one; 1–57), dinacaryā (chapter two; 58–236), and rātricaryā (chapter three; 236–272).

A large part of chapter two is devoted to articles of food, their qualities and actions. Numerous dishes are described, in part known from earlier treatises such as the Madanapālaniḥaṇṭu and Bhāvaprakāśaniḥaṇṭu. The descriptions are, however, not quoted from these works. Some noteworthy dishes are: agastyasāraka (140), bhaimīlāpsikā (104), gulorikā (107–108), khājā (110–111),²²⁴ kvāthālī (148), mallapūpa (111), māśaraṅgī (151), and niṣpanda (102). Vernacular terms are sometimes employed: baraphī (198),²²⁵ haluvā (196),²²⁶ peḍā (197). Sources are occasionally referred to: Ātreya (27), Bhojanakutūhala (177),²²⁷ Brahmāṇḍapurāṇa (219), Kṣemendra (25), Vāgbhaṭa (28 and 34), and Vaidyasārasaṃgraha (29 and 36).

The entire text of the Caryācandrodaya forms part of Dattarāma's Bṛhannighaṇṭu-

ratnākara.²²⁸

CIKITSĀCAKRASĀRA, compiled by Dvārakānātha Datta Kavirāja.²²⁹

CIKITSĀJĪNĀNĀJANA, compiled by Prasannacandra Śiromaṇi.²³⁰

CIKITSĀMAÑJARĪ, compiled by Mahimacandra Sena.²³¹

CIKITSĀSAMGRAHA by Bholānāthamiśra. The author, a resident of Mustafapur in the district of Paṇā and the great-grandfather of P.V. Sharma, completed this work in 1890/91.²³²

CIKITSĀSAMGRAHA by Prabhunāthamiśra. The author, a resident of Mustafapur in the district of Paṇā and the grandfather of P.V. Sharma, completed this work in 1871/72.²³³

COBACĪNĪPRAKĀŚA by Madhusūdanaśarma Gosvāmin.²³⁴ This work is a monograph on the China root or sarsaparilla (cobacīnī, copacīnī, covacīnī),²³⁵ a drug employed in the treatment of syphilis and other diseases. The author was a son of Vrajarāja Gosvāmin and father of Rādhākṛṣṇa and Devīdattaprasāda. He was attached to the court of Rājājīti Śiṃha (1780–1829).²³⁶

DRAVYAGUṆĀBHIDHĀNA by Vinodalāla Sena.²³⁷

DRAVYĀRTHACANDRIKĀ (or Āyurvedīyadravyaguṇābhidhāna), compiled by Siddheśvara Gupta.²³⁸

HASTĀMALAKA by Vaidya Bavabhai. This is a treatise on the preparation of metallic compounds, written in 1859.²³⁹

HINDUVAIDYĀŚĀSTRA, compiled by Subrahmanya Śāstrin.²⁴⁰

HṚDAYAPRIYA²⁴¹ by Parameśvara.²⁴² This work²⁴³ is divided into four sections (khaṇḍa) with a total of sixty chapters. The first three sections, comprising forty-eight chapters, are based on the Aṣṭāṅghṛdayasaṃhitā; the last section contains formulae taken from other sources. The author states at the beginning of his work that many verses of the Hṛdayapriya were taken verbatim from the Aṣṭāṅghṛdayasaṃhitā, while other stanzas were composed by himself, without deviating from the sense of those found in Vāgbhaṭa's work.²⁴⁴

Quotations from the Hṛdayapriya are found in 'Indian medicinal plants' by P.K. Warriar, V.P.K. Nambiar and C. Ramankutty (1994–1996).²⁴⁵

Noteworthy plant names from the work are: aghoṛī,²⁴⁶ bhadṛā,²⁴⁷ bhūkesara,²⁴⁸ gāruḍī,²⁴⁹ kṣetrajñabhūṣā,²⁵⁰ rajatāri,²⁵¹ śaśāsruti,²⁵² and vairī.²⁵³

Parameśvara²⁵⁴ was a śivadvija, i.e., a brāhmaṇa of the Mūssad caste, which ranks highly among the Ambalavāsi of Kerala.²⁵⁵ He was born in Vaikom (to the north of Travancore) and adhered to the family tradition of serving the Śiva temple of Vaikom, from his eleventh to his seventeenth year. In the early part of his career as a man of

letters he became attached to the palace of Koṭuññālūr, i.e., Cranganore, as a disciple and protégé of Godavarman Yuvārāja (1800–1851), who was a great patron of learning and a Sanskrit scholar himself.²⁵⁶ According to a local tradition, Parameśvara studied āyurveda in order to get rid of a persistent skin disease. In his later years he acquired great fame as a medical practitioner and was honoured by three successive Mahārājas of Travancore, viz. Uttanam Tirunāl, Āyilyam Tirunāl and Viśākham Tirunāl.

The Hṛdayapriya was composed in 1864. Parameśvara died in 1887.²⁵⁷

KALPASĀGARA, an anonymous work on the art of preparing medicines, composed under the patronage of Rājāvira Śiṃha, who ascended the throne of Jammū in 1857.²⁵⁸

LOKAHITAVAIDYĀŚĀSTRA, a manual of pharmacology, compiled by Kunnumburattu Cheriakelan Vaidyan.²⁵⁹

LOLAMARĀJA, also called Vaidyājīvana, a treatise in Hindī verse, composed by Benīprasāda in 1842/43. It is in the form of a dialogue between a man and a woman and has been modelled on Lolimbarāja's Vaidyājīvana.²⁶⁰

MṚTYUÑJAYASAMHITĀ by Gaṅgādhara.²⁶¹

MṚTYUSAMJIVANĪ, charms and antidotes against all kinds of poison, snake-bites, etc., compiled from Suśruta and other authors, and translated into Bengali.²⁶²

NIDĀNADĪPIKĀ by Vyaṅkaṭeś Kṛṣṇa Karaṇḍīkar,²⁶³ a compilation from various sources on nidāna.²⁶⁴

Adhyāya I: (1) paribhāṣākathana; (2) nibandhanirūpaṇa; (3) doṣadhātumalakṣa-yavḍdhikathana. Adhyāya II (kāla-jñānīya): (1) grahāvalokana; (2) āyurjñānīya; (3) kāla-jñānīya; (4) dūtasvapnaśakunajñānīya. Adhyāya III: (1) jvara; (2) saṃnipāta, āgantujvara, viśamajvara, śītavātādi. Adhyāya IV: yakṣman, śoṣa, kāsa, śvāsa, hikkā, arocaka, chardi, svarabheda, dāha, tṛṣṇā, hṛdroga, urograha, śleṣmaroga. Adhyāya V: pāṇḍuroga, raktapitta, raktāmaya, raktāśrayavyādhi, pittavyādhi, vātaśoṇita, vidradhi, arbuda, ślīpada, udara. Adhyāya VI (pacanāśayavyādhivijñānīya): agnimāndya, ajīrṇa, kṛmivāta, gulma, ānāha, śūla, amlapitta, śītapitta, atisāra, ūrustambha, āmavāta, grahaṇī, arśas, antraroga, plīhayakṛdroga. Adhyāya VII (bastimūtrapīṇḍāmaya-kathana): mūtrakṛcchra, mūtrāghāta, aśmarī, meha, pramehapiṭikā. Adhyāya VIII (manovyādhyaivātavyādhivijñānīya): mūrchā, madātyaya, mada, unmāda, apasmāra, vātavyādhī. Adhyāya IX: avāraṇīya, sadyomṛtyunidāna. Adhyāya X (tvagrogakathana): galagaṇḍa, gaṇḍamālā, apaci, granthi, visphoṭa, masūrikā, granthivyaktīkaraṇa, piṭikāvayaktīkaraṇa, kuṣṭha, śoṭha, vahnidagdhavraṇa, vraṇa, nāḍīvraṇa, āgantuvraṇa, visarpa, snāyuka, kṣudraroga. Adhyāya XI (guhyaarogakathana): bhagandara, upadaṇśa, śūkadoṣa, śukradoṣa, śāṇḍhya, vṛddhi. Adhyāya XII (strīrogavijñānīya): yoniroga, yonikanda, pradara, garbhāśayaroga, vandhyātva, garbharoga, garbhiṇīlākṣaṇa, sūtikā, stanaroga, stanayaroga. Adhyāya XIII: bālāmaya, grahapīḍā. Adhyāya XIV (viśatantra): jaṅgamaviṣa, sthāvaraviṣa. Adhyāya XV (ūrdhvāṅgarogajñānīya):

mukharoga, dantamūlaroga, oṣṭharoga, jihvāroga, tāluroga, kaṇṭharoga, mukhāntargataroga, kaṇṭharoga, kaṇṭhāpāliroga, durviddhasaṃbhavaroga, kaṇṭhamūlaroga, nāsāroga, śīroroga, kapālaroga, netraroga, vartmaroga, netrasandhigataroga, śuklagataroga, kṣṇagataroga, kācabindu, timiraroga, liṅganāśa, abhiṣyandaroga, adhimantharoga, sarvākṣiroga. Adhyāya XVI (nidānapūraṇīya): udāvarta, medoroga, kārsya, bhagna, janapadoddhvaṃsavādhī, pañcakarmādyapacāraroga, nivāraṇīya.

Sources mentioned are: ²⁶⁵ Añjana ²⁶⁶ (I.1.15; 3.91; III.1.13 = Añjananidāna 11; 2.109, 111; IV.180 = Añjananidāna 73, and 260ab = Añjananidāna 135cd); Ātreya (I.1.16; 3.108); Bhaṭṭāraka (V.130); Bheda (III.2.178; XII.177); Bhoja (V.130; X.20); Bṛhājāta (II.1.1); Caraka (passim); Dhanvantari (I.1.16; III.2.238; XII.127); Dr-dhabala (IV.264; V.219; XI.123); Hariścandra (IV.264); Hārta (I.1.16; 3.103; III.2.238; IV.10); Hārītātreya (I.1.15; IV.10; V.30, 70); Jātukarṇya (XII.84); Jejjāta (V.30; VI.137, 153); Jvaraparājaya (I.1.17; III.1.4, 43; 2.77, 184, 222, 230, 268, 295); Jyotirvid (II.1.1); Jyotiṣasārāvali (II.1.1); Kālañāna (I.1.16; 3.34; IX.138); Kāśyapa (VI.155); Kṣṇavallabhin (I.1.15; III.2.106, 109, 124, 215, 268); Mādhava (I.1.15; 3.83; III.1.9, 12); Nidānasāra (I.1.16; 3.51, 166; III.2.196); Nighaṇṭu (I.3.91); Saṃnipātālikā (I.1.17); Sārasaṃgraha (I.3.190; III.2.176, 196; V.35, 70, 74); Suśeṇa (I.1.14); Suśruta (I.1.16 and passim); Svarodaya (I.1.16); Tisāta (I.1.14, 32, 40; 3.3); Upacārasāra (I.1.16; III.2.170, 176, 223; IV.201, 205, 267; X.4, 137); Vāgbhaṭa (I.1.16 and passim); Virasimha (I.1.14; 3.11, 88); Vṛnda (I.1.15; 3.3, 83); Yogaratnākara (IX.151, 155); Yogaśata (I.1.15; III.2.222).

The sources are not referred to consistently. Many verses borrowed from, for example, the Mādhavanidāna, are not indicated as such. ²⁶⁷

The order of the diseases does not follow an established pattern and is peculiar to this treatise. Diseases or groups of diseases added to those found in the Mādhavanidāna are: urograha, śleṣmaroga, ²⁶⁸ raktāmaya, ²⁶⁹ raktāśayavyādhī, pittavyādhī, ²⁷⁰ antraroḍha, ²⁷¹ plihayakṛdroga, ²⁷² mada, vahnidagdhavaraṇa, snāyuka, śukradoṣa, śāṇḍhya, garbhāśayaroga, vandhyātva, kapālaroga, durviddhasaṃbhavaroga, ²⁷³ kaṇṭhamūlaroga, janapadoddhvaṃsaroga, ²⁷⁴ and pañcakarmādyapacāraroga.

The chapter on saṃnipātajvara describes two series of thirteen fevers of this type: the first begins with sandhika, ²⁷⁵ the second with pramūṇava. ²⁷⁶ Another fever characterized in this chapter is hāridraka.

The chapter on āgantujvara describes fevers called ajīrṇajvara, svedajvara, drṣṭijvara, malajvara, daivikajvara, and kālajvara.

The chapter on viṣamajvara mentions kṛmijajvara, bhūmivibudhajvara (= brāhmañajvara), kṣatrajvara, vaiśyajvara, and sūdrajvara.

The chapter on śitavāta describes a saṃnipātajvara called thus, which is of three types: madhyama, viṣama and adhama.

The raktāśayavyādhī is not mentioned in other treatises. ²⁷⁷

Twenty-two children's diseases are distinguished: three doṣic types and an additional fourth type of dantodbheda, dantaghāta, dantaśabda, kāladanta, ahipūtana, mukhapāka, mukhasrāva, gudapāka, upaśirṣaka, pārśvāruṇa, tālukapāta, vicchinna, pārīgarrbhika, daurbalya, gātraṣoṣa, śayyāmūtra, kukūṇaka, rodana, and ajagallī (XIII.1-4). Other children's diseases described are kṣīrālasaka (XIII.17), utphullikā (XIII.49), ku-

nda (XIII.52), and gādārī (XIII.53).

The chapter on sthāvaraviṣa describes the symptoms of poisoning by haratāla (= haritāla), manaḥśilā, vaṅga (tin), māksikadhātu, apakvamalla, śulba (copper), nāga (lead), tuttha, darada (cinnabar), rasakarpūra, vatsanābha, dhattūra, ahiphena (opium), jepāla, snuhikṣīra, and kāraskara.

Five types of kaṇṭhamūlaroga are distinguished, arising from vāta, pitta, kapha, saṃnipāta and blood respectively.

Other subjects added are: avāraṇīya, ²⁷⁸ sadyomṛtyu, ²⁷⁹ granthivyaktīkaraṇa, ²⁸⁰ piṭikāvyaktīkaraṇa, ²⁸¹ garbhīṇīlakṣaṇa, ²⁸² and nivāraṇīya. ²⁸³

The Nidānadīpikā is interesting on account of its quotations from works like the Jvaraparājaya, Upacārasāra, etc.

The chapter on yonikanda, a disease described for the first time in the Mādhavanidāna, adds to Mādhava's verses the prodromes, quoted from the Upacārasāra and Sārasaṃgraha.

The author hailed from Mahārāṣṭra and was a pupil of Bālakṣṇa, son of Kāśīnātha. ²⁸⁴

NIDĀNAPARISĪṢṬA, a supplement to Mādhava's Rugviniścaya, written by Hārādhana Vidyaratna, son of Viśārada. ²⁸⁵

The NIGHAṆṬURATNĀKARA, a large and comprehensive treatise, was compiled by Viṣṇu Vāsudeva Goḍbole and his associates. ²⁸⁶

Volume one consists of twenty sections (prakaraṇa), subdivided into chapters (adhyāya) which are mostly in verse. ²⁸⁷ These sections are respectively devoted to the properties of medicinal substances (1; guṇadoṣaprakaraṇa), embryology and anatomy (2; suśrutaśārīraprakaraṇa), the eight ways of examining a patient (3; aṣṭavidhaparīkṣāprakaraṇa), general subjects and technical rules (4; sāmānyaparibhāṣā), alchemical apparatus (5; yantraprakaraṇa), puṭapāka (6; puṭakalpanāprakaraṇa), alchemical subjects (7-12; dhātuśodhanamāraṇa, upadhātu-, pārada-, gandhaka-, abhaka-, haritālaprakaraṇa), collyria (13; añjanaprakaraṇa), and alchemical subjects again (14-20; hirākasa-, ²⁸⁸ gerū-, ²⁸⁹ uparasa-, ratna-, uparatna-, viṣa-, and upaviṣaprakaraṇa). Appended to volume one are the Arkaprakāśa and the Ajīrṇamañjarī. Volume two deals, in seventy-seven sections, with the aetiology, symptomatology, and treatment of diseases.

Section one of volume one, while mainly describing properties of drugs, adds sometimes a series of synonyms. ²⁹⁰ Section two is for the greater part identical with the Śārīrasthāna of the Suśrutasamhitā, but here and there some additional material has been incorporated. Section three not only deals with the eight types of examination (nāḍī-, mūtra-, mala-, jihvā-, śabda-, sparśa-, netra- and mukha-, and finally rūpaparīkṣā), but also with kālajñāna (i.e., signs foreboding death), the chāyāpuruṣa, ²⁹¹ some general statements about diseases, the doṣas, and finally the signs of increase and decline of the doṣas, dhātus and malas. Section four is concerned with weights and measures, beneficial and unhealthy substances, substitutes for certain drugs, the tastes, the guṇas, vīrya, vipāka and prabhāva, dinacaryā, rātricaryā, ṛucaryā, sneha, sveda,

vamana, etc., the five types of kaṣāya, etc. Section nine (pāradaprakaraṇa) describes, among other things, the eighteen saṃskāras to which mercury is subjected.

The sections of volume two are arranged in agreement with the Mādhavanidāna; at the end two sections have been added.

Sources are in general not referred to.²⁹²

The Nighaṇṭuratnākara is quoted in the Āyurvedīya Khanijavijñāna, Caube Kyā-khūbadāsa's Ajīrṇatimirabhāskara, Hariprapanna's Rasayogasāgara, Hariśaraṇānanda's Kūpipakvarasanimānavijñāna, Nirañjanaprasāda Gupta's Pāradasamhitā, the Rasadhātuprakāśa, the Rasatattvavivecana, the Śāligrāmanighaṇṭubhūṣaṇa of the Br-hannighaṇṭuratnākara, and the commentary on the Siddhabhaiṣajyamañijūṣa.

Noteworthy among the substances mentioned in the guṇadoṣaparakaraṇa are:²⁹³ ādityapatrā (185), four types of ahiphena (4: śveta-, kṛṣṇa-, pīta-, citravarna), āhulī (92),²⁹⁴ ājavallā and sugandhājāvala (6), akalkara (2),²⁹⁵ two types of ākhukarnī (12: brhatī and laghvī ākhukarnī), alitā (4), allaka (11),²⁹⁶ several types of ālu (5: madhurā-jāluka, raktarājāluka, rājālūbheda, śvetālu, kṛṣṇāluka, kṛṣṇavanāluka, kāmasyāluka), four types of āmalakī (9: āmalakī, laghudhātī, paṇāmāla, rāyāmāla), amaruphala (2), amlapaṇī (6),²⁹⁷ āmlavallī (53),²⁹⁸ three types of apāmārgaka (8: śveta-, rakta-, toyāpāmārgaka),²⁹⁹ argata (5),³⁰⁰ three types of ativiṣā (4: śuklā, kṛṣṇā, aruṇā), two types of babbūla (138: babbūla and laghubabbūlaka), bāmbī (138), bhṛṅgāhvā (142),³⁰¹ bhṛṅgamārī (142), bhūmidruma (106), bhūmīśīradikā (178), bhūmitanayā (93), two types of bimbī (103: bimbikā and tiktābimbī), two types of bola (140: rakta and kṛṣṇa), brahmarākṣasaka (169), four types of campaka (81–82: suvarṇa-, nāga-, śveta-, bhūmicampaka),³⁰² candrasūra (11), candrusa (86), cillikā (84), four types of cillī (82: śveta-, rakta-, śunacillī, cillībhedā), coravallī (84), devadārī (106), devakumbhā (63), devanala (106),³⁰³ two types of doḍī (107: doḍī and viṣadodī), dvīpāntaravacā (84), ekāṅgī (16),³⁰⁴ ekavīrā (15), gandhapātrā (187), gaṇḍāvatī (77), ghoḍekātharikā (80), three types of gholikā (80: gholikā, rājagholikā, kṣudragholikā),³⁰⁵ godhūmī (129), gomeṭha (77), gonasī (80), gopīcandanaka (76), gulghaṇṭikā (80), five types of hayārī³⁰⁶ (46: śveta, rakta, pāṭala, pīta, kṛṣṇa), herambavṛkṣa (188),³⁰⁷ hūlī (93), four types of jambū (87–88: jambū, rāja-, kṣudra-, jalajambū), jhiñjhurḍī (91), kākā (60), six types of kadālī (51: kadālī, aranya-, kāṣṭha-, suvarṇa-, mahiṣīkadālī, kṛṣṇā kadālī), kājūtaka (60),³⁰⁸ two types of kākāḍa (60: brhat- and laghu-), kakundara (62), three types of kāñcana (55–56: rakta, śveta, pīta), two types of kāṇḍavallī³⁰⁹ (56: caturdhārā and tridhārā), karambī (53), six types of karañja (46: karañja, mahā-, ghṛta-, gucca-, pūṭīkarañja, kaṇṭayukta karañja), four types of kāravella (58–59: kāravella, brhat-, jalaja-, vanajakāravella), karavīraṇī (54), five types of karkaṭī (57–58: karkaṭī, dvitīyā karkaṭī, aranyakarkaṭī, tiktakarkaṭī, cīnā karkaṭī),³¹⁰ several types of karpūra (54–55: karpūra, tīśāvāsa, himakarpūra, potāśraya, udayabhāskara, paṇakarpūra, bāṇasurapurē jātaḥ), three types of kaṭabhī (52: kaṭabhī, kṣudrā and kṛṣṇā kaṭabhī), kaṭūdarī (174), kaṭukandārikā (53),³¹¹ kaṭuvallī (53),³¹² kemukā (64),³¹³ kenā (65), six types of khadira (69–70: raktasāra and śvetasāra khadira, vīṭkhadira = arimeda, raktārimeda, laghukhadira, vallīkhadiraka), seven types of kharjūrī (68–69: kharjūrī, piṇḍa-, brhat-, madhukharjūrī, bhūkharjūrī, dvīpāntarasthā and brhadadvīpāntarasthā kharjūrī),³¹⁴ two types of kharsambalī (69: raktā and kṛṣṇā), koṣimbavṛkṣa (66–67),

kṣudrakāralikā (54), two types of kukkuṭaka (62: kukkuṭaka and devakukkuṭaka),³¹⁵ kukkuṭapādī (63), kulayī (63), kuṅkumāgaruka (86), two types of kuraṇḍikā (62: kṣudra- and brhatkuraṇḍikā), laghurājagira (168), two types of lajjālu (171: lajjālu and laghulajjālu), lāṅka (112),³¹⁶ makhāna (144), makṣeṣikā (144), mañcapatrī (163), five types of māriṣa (151–152: rakta-, haridrakta-, amla-, jalamāriṣa), mā-yāphala (152), māyini (152), motirīṅgaṇikā (92), mūṣakārī (12), three types of nāgavallī (116: nāgavallī, a samudratīrajā and a vṛkṣajā type), nakulavallikā (159), two types of nārikela (118: nārikela and mohajāṭīyaka nārikela), nimbārā (121),³¹⁷ pāṇḍuraphalī (129),³¹⁸ pareṇī (124), parvakāṣṭha (181), parvara (123),³¹⁹ five types of pāṭalā (128: śveta-, rakta-, kṣudra-, bhū-, vallīpāṭalā), paunarnavī (132), pedrubodā-raka (133), piṇḍīra (133),³²⁰ four types of pippalī (130: pippalī, saimphalī, markatī, vanasthā pippalī), pudina (132),³²¹ several types of pūgaphala (184: āndhrodbhava, campāvatībhava, roṭasaṃjñā, valgulagrāmaja, candāpurabhava, guhāgarodbhava, nailāvatagrāmaja), rājāmṛtaka (92), raktā hūlī (93), two types of rāmabāṇa (168: rāmabāṇa and brhadrāmabāṇa), rāmaphala (168),³²² rāmaśālī (8), two types of sacintikāphala (185: sacintikāphala and mahāsacintikāphala), sājaka (115), sākinī (133), sālimkanda (183), samudraśoṣa (181),³²³ segruḍī (183), sītāphala (183),³²⁴ suramāḍa (141), two types of sūraṇa (185: sūraṇa and lohitasūraṇa), surapatrī (184), suraputrī (185), śvetāṅguliphalā (80), tamākhū (103), tejonmantha (16),³²⁵ teraṇā (99), tiktairāṇḍa (90), tiktakaṅkolikā (67), trikāṇḍa (98), several types of tṛṇa (71–72: ikṣudarbhā,³²⁶ gomūtrikā,³²⁷ aśvala, śilpikā,³²⁸ niḥśreṇī,³²⁹ jaraṭī,³³⁰ majjara,³³¹ mṛgapriya, veṇupatrī, manthānaka,³³² kundaru, caṇika,³³³ śūlitrṇa, lavaṇatrṇa,³³⁴ paṇyandhaka,³³⁵ asitapattra),³³⁶ tṛṇakeśāraka (64), five types of tulasī (98–99: śvetā, kṛṣṇā, āraṇya-, kṣudrā āraṇya-, sugandhāraṇyatulasī), tuvaraka (98), three types of udumbara (12: udumbara, nadyumbara, kākodumbarikā), two types of upodakī (144 and 175: upodakī³³⁷ and pṛthivyupodakī), uttarāṇī (13), vajrabhrṅgī (75),³³⁸ two types of vaṃśa (174: vaṃśa and randhravaṃśa), vanaśopā (180), vātakumbhaphala (133), veṇukāśa (139), two types of vetra (175: vetra and brhadvetra), two types of vṛntāka (173: vṛntāka and brhadvṛntāka), vṛṣāṅka (139), yaṣṭikāśvā (61), and three types of yavānī (16: yavānī, pārasīkayavānī, khurāsānī yavānī).

The pāradaprakaraṇa describes sixty-four rasauśadhis, used in the bandhana of mercury (480–481).³³⁹

Special features found in volume two are: verses on karmavipāka are present at the beginning of many chapters; verses of an astrological character are less frequently met with;³⁴⁰ the use of mantras is not uncommon.³⁴¹

One series of thirteen saṃnipāta fevers is described, together with their treatment: sandhika, antaka, rugdāhaka, cittabhrama, śītāṅga, tandrika, kaṇṭhakubja, karṇaka, bhugnanetra, raktaśthīvin, pralāpaka, jihvaka, and abhinyāsa (42–59);³⁴² the fevers called hāridraka (60) and mantharajvara or madhuraka (102–103)³⁴³ are also described; the section on vātavyādhi mentions jṛmbhā (401), pralāpa (401), rasājñāna (401), tvakśūnyatā (402), mūtranigraha (421–422), kaṭivāta or -śūla (423), ūrdhvavāta (423–424), and trikaśūla (424–425);³⁴⁴ bahumūtra is dealt with in the section on prameha (586); the section on udara mentions śothodara (606–607); the section on aṇḍavṛddhi has also verses on vardhma (622–623) and kuraṇḍaka

(623–624); burns (agnidagdhanavarga) are dealt with in the section on āgantukavaraṇa (660–663); verses on sparśavāta are found in the section on śītapitta (710–711); seven types of śītalā are described in the section on masūrīkā (730–732), which has also incorporated the hymn to Śītalā, called śītalāṣṭaka; the section on pradara describes somaroga and mūtrāṭisāra (833–834); the section on garbhniṛoga includes recipes aiming at garbhasthirīkaraṇa, i.e., the prevention of miscarriages and immature births (841–842); the section on mūdhagarbha contains, among other things, abortifacient (garbhapātana; 848) and contraceptive formulae (garbhanivāraṇa; 850); the section on children's diseases describes the disorder called utphullikā and contains, at the end, a portion resembling the Kumāratantra;³⁴⁵ the last two sections are concerned with snāyukaroga (dracontiasis) and potavidhi.³⁴⁶

No particulars are known to me about Viṣṇu Vāsudeva Goḍbole.

NIGHAṆṬUSAMGRAHA,³⁴⁷ completed in 1893, written by Raghunāthajī Indrajī of Jūnāgarh, assisted by Jayakṛṣṇa Indujī. Since the author was generally known under the name of Katobhaṭṭa, this nighaṇṭu is often called Katobhaṭṭanighaṇṭu.³⁴⁸

The Nighaṇṭusamgraha describes more than 600 medicinal substances and gives their names in ten languages. The work is said to contain a wealth of information, based on both earlier treatises and the author's own experience.

Sources used by Raghunāthajī are: the Bhāvaprakāśanighaṇṭu, Dhanvantarīyanighaṇṭu, Lolimbarāja's Vaidyajīvana, the Madanapālanighaṇṭu, Moreśvara's Vaidyāmṛta, Śivadatta's Śivakośa, the Sodhālanighaṇṭu, and the Nighaṇṭuratnākara. The descriptions of many plants new to the Indian pharmacopoeia were taken from the Nighaṇṭuratnākara.

The Nighaṇṭusamgraha is quoted in the Śāligrāmanighaṇṭubhūṣaṇa of the Brāhmanighaṇṭuratnākara and by P.K. Warriar, V.P.K. Nambiar and C. Ramankutty in their 'Indian medicinal plants' (1994–1996).

Raghunāthajī was the middle one of the three sons of the astrologer Indra who lived in Jūnāgarh in Saurāṣṭra; Indra was the eldest son of the astrologer Murāri who resided at Saudāmāpurī, the modern Porebunder in Saurāṣṭra.

Raghunātha, a Praśnorā Nāgara brāhmaṇa by caste,³⁴⁹ was a pupil of the Praśnorā brāhmaṇa Viṭṭhalabhaṭṭa of Jāmnagar. The well-known Bhagavanlāl Indrajī, who was an expert in old Indian scripts, was Raghunātha's elder brother.³⁵⁰

PARIBHĀṢĀ by Gaṅgādhara.³⁵¹

PARYĀYAMUKTĀVALĪ, written by Gopīmohanakavirāja.³⁵² This work is a small treatise which enumerates the names of a number of medicinal substances, divided into twenty-one groups (varga): karpūradisugandhivarga, jīrakādimadhyagandhivarga, karkaṭākhyādhīnagandhivarga, ahīphenādisārajavarga, māṇikyādiratnavarga, dhātūpadhātuvarga, drākṣādimadhyagandhivarga, dāḍimādyamlavarga, jīvantyādyuttamaśākavarga, pāṭhādītiktāśākavarga, jātyādiṣuṣpavarga, kuṣmāṇḍādīlatāphalavarga, kaṣerukādīkandavarga, nyagrodhādīmahāvṛkṣavarga, nandīvrkṣādhīhrasavavṛkṣagaṇa, dūrvādīhrasavavṛkṣagaṇa, tāmbūlādīlatāvṛkṣagaṇa, hareṇvādīśimbīdhānyāśūkadhānyavarga,

śyāmākādītrīṇadhānyavarga, bhaktādikṛtānnavarga, and pāṇīyavarga.

A similar arrangement is found in Hemacandra's Nighaṇṭuśeṣa and Haricaraṇa's Paryāyamuktāvalī.

Sources are not mentioned, but the author refers in the introductory verses to a koṣa by Mādhavakara.

Interesting substances mentioned are: aguru and kṛṣṇāguru (2); ahīphena (13); four types of candana (śrīkhaṇḍa, śvetacandana, haricandana, kālyāka; 2), to which raktacandana (12) and kucandana (13) have to be added; jalakandā kadaḷī (42); jayapāla (47); two types of kalambī (kalambī and kṛṣṇapallavā; 29); kulīṇja (8); kumaricaka (30); madhuniṣpāva (55); mahākadamba (36); pītarohiṇī (9);³⁵³ śakrāśana (31);³⁵⁴ sarpakaṅkālikā (54); śīrāmāla (26).

PATHYĀPATHYA by Gaṅgādhara.³⁵⁵

PRAYOGACANDRODAYA by Gaṅgādhara.³⁵⁶

RĀMACANDRIKĀ, a compilation on the treatment of various diseases, probably written by Rāmacandra, son of Kāśīnātha. The subject of karmavipāka is also dealt with, based on works like the Brahmagītā,³⁵⁷ Brahmapurāṇa, Maheśvaratantra,³⁵⁸ Padmapurāṇa, etc. The MS of this treatise may date from the nineteenth century; the compilation itself is probably not much earlier.³⁵⁹

ROGAPARĪKṢĀ, compiled by Gaṇeśa Harī Śeṣaḍe.³⁶⁰

(SADVAIDYA)BHĀVĀVALĪ by Jagannāthagupta, son of Śivanātha: biographies of physicians in Senahatī.³⁶¹

(SADVAIDYA)KULACANDRIKĀ by Dvārakānātha Dāsa Gupta: a work on the Vaidya families of Bengal that forms a supplement to Rāmakānta Dāsa's Sadvaidyakulapañjikā.³⁶²

SADVAIDYAKULAPAÑJIKĀ, a genealogy of the Vaidya caste, written in verse, by Kavikaṇṭhahāra Rāmakānta Dāsa,³⁶³ who was the teacher of Gaṅgādhara Kavirāja.³⁶⁴

ŚĀLIGRĀMAUṢADHAŚABDASĀGARA³⁶⁵ or Āyurvedīya Auśadhikoṣa by Śāligrāma:³⁶⁶ a medical lexicon, arranged according to the order of the Sanskrit alphabet, with short explanations in Sanskrit and with Hindī synonyms.

ŚAMKARĀKHYA,³⁶⁷ Śamkaraśata,³⁶⁸ or Vaidyakaśāraśamkarākhyā,³⁶⁹ a work by an author called Rāma.

The treatise³⁷⁰ consists of 171 verses, arranged in six chapters. Chapter one (1–39), which contains a table of contents (2), deals with the messenger (dūta; 3–4), astrology connected with medicine (5–14), curability and incurability (15–16), the examination of the pulse and the urine (18–22), the symptoms of the excited doṣas (23–30), and types of patients that should or should not be treated (31–39). Chapter two (40–50) is

about general therapeutic measures (sneha, dāgha, vamaṇa, recana, taila, ghr̥ta, nasya). Chapter three (51–95) and four (96–105) are chiefly concerned with the symptoms and treatment of fever and diarrhoea. Chapter five (106–157) gives prescriptions for a variety of diseases. Chapter six (158–171) contains prescriptions against some diseases and a few verses on inauspicious astrological yogas.

Rāma quotes in his work the Śārṅgadharasamhitā (104–105).³⁷¹

A disease called kūrma is described (161–165).

The author mentions his name as Rāma (1), without giving any more information.

The work was completed in 1896/97.³⁷²

ŚARABHENDRAVAIDYARATNĀVALĪ. This work, in Marāṭhī, consists of a collection of recipes, made on the request of or written by one of the Marāṭha kings of Tanjore, Sarabhoji (or Serfoji) II (A.D. 1798–1832),³⁷³ who established a medical institution, called Dhanvantari Mahāl, where both English and Indian physicians harmoniously worked together.³⁷⁴ A Tamil version of this treatise has been published.³⁷⁵ The same king ordered a very large collection of tested recipes to be made.³⁷⁶

SĀRAKAUMUDĪ, compiled by Vasantakumāra Rāya.³⁷⁷

SIDDHABHĒSAJAMANIMĀLĀ,³⁷⁸ composed by Kṛṣṇarāma.

The treatise consists of 1,864 verses in various metres,³⁷⁹ composed by the author. It is divided into five sections (guchaka). Section one (upodghāta; 22 verses) contains the genealogy of the author. Section two (haritakyādivarṇana; 316 verses) consists of a nighaṇṭu, which enumerates the properties of medicinal substances, articles of food, and prepared dishes. Section three (153 verses) deals with the preservation of health (svāsthyaśaṃrakṣaṇaprakaraṇa; 1–56), the six tastes and their combinations (rasādibhedaprakaraṇa; 57–64), prognostics (dūtādiprakaraṇa; 65–97), wonderful tales arousing the interest (kautuka, camatkāra) of patients and distracting them (muktakasaṃgraha; 98–127), and fireworks (khaḍhūpavarṇana; 128–153).³⁸⁰ Section four (1,180 verses) is exclusively devoted to the treatment of diseases.³⁸¹ Section five (193 verses) is concerned with iatrochemistry (rasādiprakaraṇa) and aphrodisiacs (vājīkaraṇaprakaraṇa).

The prescriptions in section four are of both an āyurvedic and iatrochemical character. The types of pharmaceutical preparation called śārka³⁸² and arka³⁸³ are not uncommon. Magical and religious ways of treatment are also met with.³⁸⁴

The names of relatives, colleagues and pupils who transmitted particular formulae to the author are often explicitly mentioned. These names are: Ādityarāma (4.435 and 1029),³⁸⁵ Āśamayogin (4.226),³⁸⁶ Bālamukunda (4.997),³⁸⁷ Chagana (4.170),³⁸⁸ Cimana (4.916), Dāmodara (4.692),³⁸⁹ Ghanaśyāma (4.471), Jivanātha (4.1116),³⁹⁰ Jugaladāsa (4.339), Karuṇāśaṃkara (4.1166),³⁹¹ Mahādeva (4.437),³⁹² Raghunātha (4.767), Sadānanda (4.357),³⁹³ Śambhudatta Sārasvata (5.52–53),³⁹⁴ Śyāma (4.186),³⁹⁵ and Śyāmarāma (4.514). Sometimes Kṛṣṇarāma refers to his grandfather (4.11 and 283) or his guru (4.338, 663, 746). In other instances he does not reveal the name of the person who passed down a recipe (4.796–797 and 897).

A few sources only are mentioned by name: the Bṛhatṭrayī (3.94; 4.4) and Laghu-trayī (3.94), the Jayapuramelakakutukakāvya (3.136),³⁹⁶ and the Sandhānapaddhati (2.220). The sauśrutāḥ are referred to once (4.732).

The Siddhabhēśajamanimālā is quoted in the Bhēśajasamhitā, the commentary on the Siddhabhēśajayamañjūṣā, Devasiṃha Viṭṭhal's Bṛhadāsavāriṣṭasaṃgraha, Gulrājśarmamiśra's commentary on the Āyurvedaprakāśa, Gulrājśarmamiśra's Siddhaprayogalatikā³⁹⁷ and Viśikhānupraveśavijñāna, Hariprapanna's Rasayogasāgara, Hariśaraṇānanda's Kūpapakvarasanirmānavijñāna, and Yādavaji Trikamji Ācārya's Rasāmṛta and Siddhayogasamgraha.

Kṛṣṇarāma's views³⁹⁸ on the actions of drugs have been influenced by Keśava's Siddhamantra; their effect on the doṣas is considered their most basic characteristic (2.1–17). The arrangement of the diseases in section four is for the greater part in agreement with the Mādhavanidāna. The following chapter-headings are absent: krimi, tri-ṣṇā, pānātyaya, vātarakta, ūrustambha, āmavāta, hydroga, medoroga, ślīpada, vidradhi, śūkadoṣa, amlapitta, visarpa, visphoṭa, and masūrīkā. A chapter on snāyukaroga (4.882–894) has been added; vardhma is dealt with in the chapter on vṛddhi; phiraṅga is mentioned in the chapter on vātavyādhi (4.479).

Noteworthy names of diseases are: mauktikajvara (4.20 and 21),³⁹⁹ gaurjarī (4.319),⁴⁰⁰ śūnyavāta (4.463–466),⁴⁰¹ nalabandhasamīra (4.607),⁴⁰² sauṛjāka (4.731, 772, 781, 785, 798, 807, 810, 812, 815),⁴⁰³ śūkadoṣa (4.914),⁴⁰⁴ prṣṭhavisphoṭa (4.925),⁴⁰⁵ challaka (4.935),⁴⁰⁶ cepya (4.998),⁴⁰⁷ utphullikā (2.298; 4.1137, 1140, 1143),⁴⁰⁸ and darbha (4.1145).⁴⁰⁹

A rare type of pharmaceutical preparation is called phalāspā (4.51–54).⁴¹⁰ New substances prescribed by the author are ice (kṛtrima hima; 4.207 and 1070) and soap (sābu; 4.219, 616 and 926).

Noteworthy medicinal substances are: akīka (2.303),⁴¹¹ amarūḍa (2.155),⁴¹² ambara (2.113),⁴¹³ attara (2.149),⁴¹⁴ bābūnā (4.52),⁴¹⁵ banapsā (2.55),⁴¹⁶ cirapoṭikā (2.56),⁴¹⁷ cobacinī (4.477; 5.151), dhūmavallī (4.373),⁴¹⁸ dvīpāntarīya cūkaka (4.227),⁴¹⁹ dvīpāntarīyavāta (4.620),⁴²⁰ dvīpāntarīyavṛkṣāmla (4.400 and 424),⁴²¹ elacīphala (2.157),⁴²² gambhīrī (4.450),⁴²³ gaṇḍagātra (2.156),⁴²⁴ gañjā (4.914), ghr̥tāśman (4.943),⁴²⁵ gīlaramanī (4.985),⁴²⁶ gucchaughapūṣpa (2.131),⁴²⁷ gundaṇī (4.313),⁴²⁸ haṃsarāja (4.830),⁴²⁹ iśvarabola (2.41),⁴³⁰ jaṅgāla (4.204 and 684),⁴³¹ jarīṣka (4.24),⁴³² jāvintrikā (2.122),⁴³³ jīrāvana (4.52),⁴³⁴ jūphikā (4.322 and 329),⁴³⁵ kabābacinī (2.124),⁴³⁶ kaharavā (4.782),⁴³⁷ kakeraka (4.713),⁴³⁸ kalā (4.14),⁴³⁹ kālāñjanī (4.581),⁴⁴⁰ kālāñjanikā (2.64),⁴⁴¹ kalasora (4.292, 363, 787, 936),⁴⁴² kalvañjī (4.262),⁴⁴³ kalvañjikā (2.40),⁴⁴⁴ kāmālikā (4.419),⁴⁴⁵ kaselikā (2.106),⁴⁴⁶ kāsini (2.45),⁴⁴⁷ kaṭīragundraka (4.779),⁴⁴⁸ kaṭola (4.905),⁴⁴⁹ kattha(ka) (4.159, 826),⁴⁵⁰ kaṭṭīragundra (2.134),⁴⁵¹ kaukkuramārkava (4.240),⁴⁵² kṛṣṇabīja (4.599),⁴⁵³ kṛṣṇagundra (4.567 and 1091),⁴⁵⁴ lohabāṇa (2.132; 4.435; 5.105),⁴⁵⁵ mamīra (2.66),⁴⁵⁶ mañju (4.769, 977, 980),⁴⁵⁷ marālapadikā (2.82),⁴⁵⁸ mastakīgundra (2.134),⁴⁵⁹ mṛtāśman (4.693),⁴⁶⁰ nara (4.557 and 722),⁴⁶¹ patagrāhītṛṇa (4.236),⁴⁶² pittakārīṇī (2.38),⁴⁶³ pradaradārīṇī (4.1079–1081),⁴⁶⁴ pradīna (4.423),⁴⁶⁵ rādhagālī (4.493),⁴⁶⁶ rājaśanīkā (4.1069),⁴⁶⁷ raṅgavarata (4.980 and 985),⁴⁶⁸ ratnajyotis (4.620),⁴⁶⁹ revatī (4.646 and 1107),⁴⁷⁰ revatikā (2.62),⁴⁷¹ sābbūdāna (2.179),⁴⁷² sābu (4.219 and

926),⁴⁷³ s̥abuna (4.616),⁴⁷⁴ sahasradru (4.812),⁴⁷⁵ sahasrapuṣpa (4.1173),⁴⁷⁶ sahasra-suma (4.229),⁴⁷⁷ s̥ālīma (2.104; 4.52 and 779),⁴⁷⁸ sanāmakī (2.63),⁴⁷⁹ śarkarākanda (4.493),⁴⁸⁰ śatamalla (2.294),⁴⁸¹ śavagrāvan (2.299),⁴⁸² śavāśman (4.205 and 825),⁴⁸³ śavopala (4.713),⁴⁸⁴ sauraka (4.536 and 790),⁴⁸⁵ soraka (4.533),⁴⁸⁶ suma (4.343, 638, 701),⁴⁸⁷ sumakanda (4.14),⁴⁸⁸ svādusurañjana (4.352),⁴⁸⁹ tarbūja (2.153),⁴⁹⁰ tejo'mbu (4.368),⁴⁹¹ todari (2.105),⁴⁹² unnābha (4.317),⁴⁹³ usabbā (4.477),⁴⁹⁴ vajradantī (4.222),⁴⁹⁵ vajrakadhānya (4.623 and 676),⁴⁹⁶ vikā (4.698 and 1067),⁴⁹⁷ viṣakharpara (4.457),⁴⁹⁸ and viṣanārikela (4.1129).⁴⁹⁹

The name of the author appears at several places of his work as Kṛṣṇa (1.5; 5.189), Kṛṣṇakavi (1.22; 4.1180; 5.193), Kṛṣṇarāma (4.2), Kṛṣṇākhyā Vyāsa (4.4), and Kṛṣṇa-śarman (5.190). He was born in 1848/49 and died in 1897/98. His teachers were Jīvanātha, Candanāśa, and his father (5.190). The Siddhabheṣajamaṇimālā was written for Mādhava, ruler of Jayapura (1.13; 5.189), who descended from Rāma, Jayasiṃhavarman, and Māna (1.6–9).

Kṛṣṇarāma was a prolific writer,⁵⁰⁰ who wrote the following fourteen works: Āryālamkāraśataka, Chandogaṇita, Gappasamādhāna, Gopālagītā, Holāmahotsava, Jayapuramelakakutuka, Jayapuravilāsa, Kāśīnāthastava, Mādhavapāṇigrahotsava, Mukta-kamuktāvalī, Palāṇḍurājaśataka, Sāraśataka, Siddhabheṣajamaṇimālā, and Vīdvadvidyatarāṅgiṇī.⁵⁰¹

Kṛṣṇarāma's father was Kundana (1.4) or Jīvanarāma, who lived from 1828/29 to 1880/81; he was the author of a work on Yūnānī medicine, called Hikamanmandā-rabandha (1.4).⁵⁰² Kṛṣṇarāma's grandfather was Lallurāma (1.3) or Viṣṇurāma, who lived from 1798/99 to 1873/74.⁵⁰³ His great-grandfather was Lakṣmīrāma, who was born in Ahmedābād, but became the court physician of Pratāpasīṃha of Jayapura (1778–1803).⁵⁰⁴

The Siddhabheṣajamaṇimālā was completed in 1896/97 (5.192).⁵⁰⁵

A useful Sanskrit commentary (tippanikā) on the Siddhabheṣajamaṇimālā was written by Lakṣmīrāma (1873–1939), one of Kṛṣṇarāma's pupils.⁵⁰⁶

Sources, referred to or quoted by name by Lakṣmīrāma, are:⁵⁰⁷ Amara (2.181, 222; 3.34; 4.38, 212, 671), Amaraṭikā (2.116), Aruṇa (2.39), Aruṇadatta (2.170), Aṣṭāṅgharḍaya (3.75), Āyurvedarasāyana (2.281),⁵⁰⁸ Bhaṭṭi (2.315; 3.128),⁵⁰⁹ Bopadeva (2.281),⁵¹⁰ Brahmavaivartapurāṇa (2.263), Candrikākāra (2.257), Caraka (2.257, 281, 287; 3.2, 68, 98; 4.1; 5.92), Cintāmaṇi (2.263), Darpaṇa (3.129), Dhanapati (2.178, 242), Hemādri (2.257), Holāmahotsava (2.148),⁵¹¹ Jayapuravilāsa (4.1116),⁵¹² Kośa (2.178, 97, 247; 4.728; 5.99, 131), Kumārasaṃbhava (2.245), Mādhava (2.2, 230),⁵¹³ Māgha (2.23, 132), Maheśvara (2.81), Manthānabhairava (2.1), Mantrakalpādruma (3.103),⁵¹⁴ Merutantra (2.179), Muktakamuktāvalī (2.148; 3.36),⁵¹⁵ Nāḍiprakāśa (3.71), Naiśadhīya (2.23), Nighaṇṭu (2.192; 4.914; 5.32), Nighaṇṭusāra (2.148, 294), Nighaṇṭuviśeṣa (2.113), Palāṇḍurājaśataka (2.240, 243),⁵¹⁶ Pañcatattvaparakāśa (3.145),⁵¹⁷ Patākāgrantha (3.62),⁵¹⁸ Rabhasa (2.28), Raghuvamśa (5.30), Rājanighaṇṭu (2.78), Rasaratnasamuccaya (5.2, 19), Rasaśāstra (5.7, 11), Ratnamālā (2.132), Rugvinīścaya (4.133, 882), Śabdārthacintāmaṇi (2.97,

211, 296; 3.128), Siddhamantraprakāśa (2.17), Siddhasāra (2.204), Suśruta (2.1, 257, 281; 3.2, 12, 38; 5.92), Vāgbhaṭa (2.27, 201, 249; 3.15, 79; 4.9, 133, 134), Vāpyacandra (2.243), Vaśiṣṭha (2.169), Vidagdhamukhamanḍana (4.16, 49),⁵¹⁹ Vijñāneśvarabhāṭṭāraka (2.211),⁵²⁰ Vṛnda (4.882), Yājñavalkya (3.20), Yāvana Nighaṇṭuviśeṣa (2.113), Yogaratnākara (2.109), and Yogasudhānidhi (2.298).⁵²¹

Lakṣmīrāma is mentioned in Gulrājśarmamiśra's Siddhaprayogalatikā.⁵²²

A Hindī commentary, called Maṇicchatā, on sections four and five of the Bheṣajamaṇimālā, was written by Devendraprasādabhaṭṭa, a great-grandson of Kṛṣṇarāma.⁵²³

SUKHASĀDHAKA by Parameśvara.⁵²⁴ This work is said to be based on the Hṛdayapriya by the same author.⁵²⁵

SŪPĀŚĀSTRA, a work on the culinary art, by Bhīmasena.⁵²⁶

TĀMBŪLAMAÑJARĪ,⁵²⁷ an anonymous collection of verses on betel chewing,⁵²⁸ compiled from many sources.

The treatise describes the beneficial medicinal effects of betel (tāmbūla) leaves (1–2), the thirteen qualities of tāmbūla (3),⁵²⁹ when to chew betel (4–6), the proportions of the ingredients of a quid (7–11), the bad effects when the proper ratios are not observed (12–18), rules for chewing (19–23), the deities presiding over the various parts of a betel leaf (24–25), rules for handling a quid (26–31), the number of leaves to be presented to particular classes of persons or relatives (32–39),⁵³⁰ rules (40–52), the ingredients of a chew (53–59), rules (60–62), the beneficial effects of chewing (63–64), classes of persons who should avoid chewing betel (65–72), the ingredients again (73–75), rules (76–78), and the properties of the leaves of the betel plant grown in various countries (79–88).⁵³¹

The remaining part of the treatise is devoted to the other ingredients and diverse substances that can be added to a quid: the betel nut (pūga; 95–113), lime (cūrṇa; 114–116), tobacco (tamāku; 117), khadirasāra (118–124), kastūrī (125–142), latākastūrī (143), gold foil (suvarṇadala; 144–145), silver foil (raupyadala; 146–147), almonds (vātāma; 148–149), kaṅkola (150–152), kuṅkuma (153–161), mace (jātipatṛī; 162–165), nutmeg (jātiphala; 166–169), small cardamoms (sūkṣmailā; 170–174), cloves (lavaṅga; 175–178), ginger (śuṇṭhī and ādraka; 179–180), sandal (candana; 181–188), coconut (nārikela; 189–194), tvac (195–200), and camphor (karpūra; 201–223).

Glosses are found after verses 41, 113, 154, 200 and 219.

One verse (57) is in a regional language.

Sources quoted are: Acyuta (55),⁵³² Amaramālā (gloss ad 113),⁵³³ Bharadvāja (7), Cūḍamaṇi (50–53), Dhanvantari (3–5),⁵³⁴ Dravyaguṇanighaṇṭu (117), Hemādri (gloss ad 41), Rājanighaṇṭu (9–11), Ratnamālā (93), Ratnamālāmañjarī (115),⁵³⁵ Trimallaṭīkā (8; gloss ad 219),⁵³⁶ Vaidyāmṛta (145),⁵³⁷ Vaidyaratna (60–62; 94), Vopadeva (54), Yogamālā (25), and Yogaratna (144; 147).

The sources of numerous verses are not specified, but many stanzas are from the Aṣṭāṅgasamgraha,⁵³⁸ Bhṛatsaṃhitā,⁵³⁹ Dhanvantarīyanighaṇṭu,⁵⁴⁰ Rājanighaṇṭu,⁵⁴¹

and *Suśrutasaṃhitā*.⁵⁴²

The quotation from Acyutarāya Moḍak's *Saubhāgyakalpadruma*⁵⁴³ points to the nineteenth century as the period of compilation of the treatise.

VAIDYABHŪṢAṆĀ by Bhīmasena.⁵⁴⁴

VAIDYADARPAṆA by Prāṇanātha, son of Kalyāṇabhaṭṭa. This work was composed in 1827.⁵⁴⁵ It is quoted in Hariprapanna's *Rasayogasāgara*.

VAIDYAHITOPADEŚA, written by Raghunāthaprasāda.⁵⁴⁶

VAIDYAKAŚABDASINDHU,⁵⁴⁷ by Umeśacandragupta,⁵⁴⁸ a medical lexicon, arranged according to the order of the Sanskrit alphabet. It refers to a large number of sources.

Umeśa and the *Vaidyakaśabdasindhu* are quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*. The *Vaidyakaśabdasindhu* is quoted in Somadeva-śarman's commentary on the *Āyurvedaprakāśa*.

VAIDYAMUKTĀVALĪ, composed by Mauktika (Motīrāma), son of Māṇikyacandra and pupil of Rāmanātha. The work is provided with a commentary. Sources quoted are the *Bhāvaprakāśa*, *Hikmatprakāśa* and *Nāḍīprakāśa*.⁵⁴⁹

This treatise probably dates from the nineteenth century since the *Hikmatprakāśa* was completed in 1773/74 and the MS of the *Vaidyamuktāvalī* dates from 1851/52.⁵⁵⁰

VAIDYATATTVARATNĀKARA, compiled by Maganalāla Viśvanātha Vaidya.⁵⁵¹

VAIDYATATTVAVINIŚCAYA by Gaṅgādhara.⁵⁵²

VIDVANMANORAṆJANĪ, compiled by Padmalocana Nyāyaratna Bhaṭṭācārya.⁵⁵³

VĪRAHĀRALATIKĀ by Sāhibrāma, son of Dillārāma. The author wrote in 1845, at the request of Raṇavīrasimha, the *Vīrahāralatikā* as a commentary on the *Vīravaidyaratnahāra*. The latter work was translated from the Arabic either by Sāhibrāma himself or by Śāligrāma.

Sāhibrāma was a native of Kaśmīr and died in 1872. His other works are: *Lakṣyavedhana*, *Nīṭikalpalatā*, a commentary on the *Pañcāśāyaka*, and *Vīratratna-śekharaśikhā*.⁵⁵⁴

VIŠAHARATANTRA by Gaṇeśa, son of Sabhācandra and a resident of Jammū. This work, a toxicological treatise, was completed in 1845, at the behest of king Raṇavīra Siṃha.⁵⁵⁵

Chapter 5

Twentieth-century authors and works

AGADATANTRAPRAKĀŚA, compiled by Gadādhara Vaidya Śarman.¹

AJĪRṆATIMIRABHĀSKARA² by Hakīm Caube Kyākhūbadāsa.³ This work, a monograph on indigestion (*ajīrṇa*), is written partly in Sanskrit verse, partly in Hindī prose. It is divided into four chapters. Chapter one (16 verses) describes the disorders of the digestive fire, *bhāsmaka* included. Chapter two (12 verses) is about the six types of *ajīrṇa*, as distinguished by Mādhava; the characteristics of the pulse in disorders of the digestive fire are added. Chapter three (38 verses) describes what is beneficial (*pathya*) and harmful (*apathya*) in cases of *ajīrṇa*; it is, apart from some general therapeutic measures, especially concerned with a series of specific remedies against *ajīrṇa* caused by particular substances.⁴ Chapters four and five contain recipes,⁵ mostly (chapter four) or entirely (chapter five) in Hindī.⁶

The author was a son of the physician *Caturvedaśaṃkaralāla*,⁷ and lived, like his father, in Mathurā.⁸

ANUGRAHAMĪMĀSĀ⁹ by Vaṭṭakkeppāṭu Nārāyaṇan Nāyar (1878–1959).¹⁰ This work, in six sections, deals with bacteriology and infectious diseases from an *āyurvedic* point of view. The author was of the opinion that the ancient Indian physicians were already acquainted with discoveries made with the aid of the microscope.

ANUPĀNADARPAṆA¹¹ by Jñārasarāmaśarman, a monograph on *anupāna* in 550 verses, arranged in nine chapters (*pramoda*).

Chapter one is on the *vaidya*, chapter two on *āyurveda* and its eight *aṅgas*, chapter three on weights and measures, and on the examination of the pulse. Chapter four (84 verses) is devoted to the *anupānas* to be prescribed along with various simple or compound drugs of an *āyurvedic* type, and chapter five (165 verses) to *anupānas* that have to be used in combination with *rasauśadhas*. Chapter six (63 verses) deals with the preparation of a number of compound drugs (mostly *rasayogas*), their actions, and their application in various diseases. Chapter seven (91 verses) is on alchemical subjects and describes the *dhātus*, *upadhātus*, *ratnas*, *uparatnas*, *viṣas*, and *upaviṣas*, together with their purification (*śodhana*) and killing (*māraṇa*). Chapter eight (55 verses) is about diverse types of *bhasman*, and chapter nine (28 verses) about disorders (*doṣa*) due to the ingestion of inorganic substances, and the alleviation (*śānti*) of these disorders.

Sources quoted are: *Bhaiṣajyasārāṃgī* (5.18), *Bhāvaprakāśa* (3.7; 7.9, 26, etc.), *Gaurikañcālikātantra* (4.68), *granthāntara* (4.84; 5.5, 15–16, 45, 52, 66,

etc.), *Madanapālanighaṇṭu* (4.69–70; 8.42), *Rasendrapurāṇa* (5.97–98, 104, 132, 165, etc.), *Rasendrasārasaṃgraha* (5.3, 21–22; 6.24–25, etc.), *Śāringadharaśaṃhitā* (3.5; 4.55, 58, 74, 76–77, etc.), *Suśruta* (1.2–4, 6, 9; 2.3, etc.), *Vāgbhaṭa* (3.16; 4.50, etc.), (Lolimbārāja's) *Vaidyajīvana* (3.17; 4.51, 72–73, etc.), and (Raghunātha's) *Vaidyavilāsa* (5.136).

The *Anupānadarpaṇa* is mentioned in Jñārasarāma's version of the *Amṛtasāgara* and was therefore written earlier than the latter work.

Jñārasarāma also wrote an *Anupānaratnākara*.

ANUPĀNAMAÑJARĪ, compiled by Puvvāda Sūryanārāyaṇa Rāvu.¹²
ANUPĀNARATNĀKARA by Jñārasarāma Śarman.¹³

ĀROGYĀMṚTABINDU or *Śītalāparihāra* or *Śītalārogaṇṭhāra* by Jiyālāl, a treatise on śītalā (smallpox) and its treatment, written in Hindī prose, interspersed with Sanskrit quotations.¹⁴

The work is divided into three parts: (1) dākṛtānīdān and vaccination (1–99), (2) yūnāniyomkā siddhānt (99–104), (3) āyurvedokt śītalāroga (104–147), followed by a nighaṇṭu or auśadhisvarūpavarṇana (147–173), a small section on substitutes (pratinidhi) (173–174), and information on the author (174–176).

Part one deals with the views of western medicine on smallpox and with vaccination, part two with the views of Islamic medicine. Part three discusses the āyurvedic views on masūrīkā and śītalā.

Authors and works quoted in the first half of part three are: *Brahmasaṃhitā* (3.1–3),¹⁵ *Bharadvāja* (3.4–10), *Bheḍa* (3.11–15), *Mādhavanidāna* (3.16–17), *Durgabhaṭṭa* (3.18–20), *Suśruta* (3.21), *Vaṅgasena* (3.22–26), *Śāringadhara* (3.27–29), and *Bhāvaprakāśa* (3.65–74). The second half quotes from the *Haṃsarājānidāna* (3.2) and the *Kāśīkhaṇḍa* of the *Skandapurāṇa* (3.3–14).¹⁶

The Hindī prose of the first half of part three refers to the following works: *Bhāvaprakāśa* (3.22–26 and 29), *Brahmasaṃhitā* (3.1–3), *Mādhavanidāna* (3.22–26), and *Suśrutasaṃhitā* (3.1 and 22–26). The Hindī prose of the second half refers to: *Arkaprakāśa* (3.5), *Bheḍa* (3.9), *Brahmasaṃhitā* (3.1–2), *Cakradatta* (3.2), *Caraka* (3.1–2), *Kāmadhenupaddhati* (3.1–2),¹⁷ *Kanakavilāsa* (3.6 and 8), *Kāśīkhaṇḍa* (3.1–2), *Manoramā* (3.1–2), *Suśruta* (3.5), *Ṭoḍarānanda* (3.1–2), *Vaidyamahendri* (3.1–2),¹⁸ *Vaidyasarvasva* (3.1–2), *Vaidyarahasya* (3.3), *Vaṅgasena* (3.3, 7, 10, 12), and *Yogacintāmaṇi* (3.3).

The author, a Jain, of Agravāla varṇa, was a son of Caudharī Sumerucand and a grandson of Caudharī Mānikcand. He was born in Pharrukhnagar in 1852.

ĀROGYASINDHU by Raṅganātha Sakhārāma Lāle, also called *Śukrasaṃhitā* and *Kāmasāstra*, a work on sexual disorders.¹⁹

ĀSAVĀRIṢṬA by Satyadeva Vidyālaṃkāra.²⁰

ĀSAVĀRIṢṬASAṃGRAHA by Jagadīśaprasāda Garga.²¹

ĀSAVĀRIṢṬASAṃGRAHA by Pakṣadhara Jhā.²²

ĀSAVĀRIṢṬAYOGASAṃGRAHA by Vayaskara N.S. Mooss,²³ a collection of 122 recipes of āsavas and aṛiṣṭas in Sanskrit, accompanied by a commentary in Malayālam.

ĀSAVAVIJÑĀNA by Hariśaṇānanda.²⁴

AṢṬĀNGAŚĀRĪRA by Vaidya Ratnam P.S. Varier (Vāriyar).²⁵ This work is an elaborate textbook on modern anatomy and physiology in 2,045 Sanskrit verses, arranged in eight chapters. A large number of new terms are found in it, which are explained in the author's commentary, called *Gūḍhārthabodhinī*. This commentary also gives the English equivalents of the newly introduced Sanskrit terms.

The author (1869–1944)²⁶ was the founder of the Ārogyavaidyaśālā (Kottakal, Kerala).²⁷ He also wrote a *Bṛhacchārīra*.

AUṢADHAKRIYĀ, compiled by Śaṃkaralāla Hariśaṃkara.²⁸

AUṢADHANIGHAṆṬU, a Sanskrit–Malayālam dictionary of nearly 30,000 names of drugs and medicinal plants, arranged in the order of the Sanskrit alphabet, compiled by Kāṇippayūr Saṅkaran Nampūtīrippāṭu in the beginning of the twentieth century. The author issued from a family of astrologers attached to the court of the king of Cochin.²⁹

AUṢADHIKRIYĀ, a compilation of prescriptions.³⁰

ĀYURVEDACANDRIKĀ or *Āyurvedīyaśabdārthanirṇāyako Bṛhadabhidhānagranthaḥ*, compiled by Haralāla Gupta, a dictionary of Sanskrit words with Bengali equivalents.³¹

ĀYURVEDACINTĀMAṆĪ, compiled by Baladevaprāsāda Mīśra, son of Sukhānandamīśra.³²

This work is a nighaṇṭu, enumerating synonyms and properties of medicinal substances, compiled from the *Carakasāṃhitā*, *Suśrutasaṃhitā*, the works of Vāgbhaṭa, the *Bhāvaprakāśa*, *Rājanighaṇṭu*, *Atrisāṃhitā*, *Rājavallabha*, *Vaidyakanighaṇṭu*, and other works.³³ It is divided into twenty-two vargas and describes 775 items. Almost all the substances are known from other treatises under the same or other names. Noteworthy among them are: āṛpya (6.17),³⁴ bahunetra (6.20),³⁵ drauṇeya lavaṇa (1.96), sunepālī (6.48),³⁶ surapriya (2.40),³⁷ and śyāmaparnī (19.13).³⁸

ĀYURVEDADARŚANA by Priyavrat Śarmā.³⁹ This work, in sūtra style, accompanied by a commentary in prose, deals with the philosophy of āyurveda.

Chapter one (prameyapāda; 31 sūtras): the definitions of āyus and āyurveda; prakṛti is the object of āyurveda; āyurveda is divided into sixteen branches;⁴⁰ sattva, ātman and śārīra are the subjects of āyurveda; sattva consists of antaḥkaraṇa, manas, buddhi and ahaṃkāra, and is characterized by prāṇa; the characteristics of the ātman; the characteristics of the body (śārīra); puruṣa is the combination of ātman and body; the five bhāvavikāras (stages of transformation) are: hetu, utpatti, vṛddhi, upaplava and viyoga;

the six accessory (tantropayogin) bhāvas are: dravya, guṇa, karman, samavāya, sāmānya, and viśeṣa; the definitions of these six accessory bhāvas; the five mahābhūtas; their specific properties; all substances and the body are composed of the five mahābhūtas; the functions of doṣas, dhātus and malas are based on the mahābhūtas; health and disease depend on the doṣas, which are of the nature of prāṇa; the natural functions of the three doṣas, vāta, pitta and kapha, are vikṣepa, ādāna and visarga; the dhātus, directed inwards (antarmukha), are supportive and nourishing; the seven dhātus; ojas is the essence of all the dhātus and the seat of prāṇa; the malas are devoid of essences (niḥsāra), directed outwards (bahirmukha), and the causes of painful conditions (ābādhā); agni performs pāka and is the causative factor in ādāna; among the bhūtvagnis, dhātuvagnis and annāgni, the first group is foremost; the constituents called srotas are pathways for the rasa, etc., and are of the nature of ākāśa; prakṛti consists of the predominance of a doṣa, present from birth onwards.

Chapter two (pramāṇapāda; 8 sūtras): the definition of pramāṇa; the four pramāṇas are āptopadeśa, pratyakṣa, anumāna and yukti; definitions of these pramāṇas; jñāna (knowledge), parīkṣā (examination) and prayoga (application) are the elements of medical procedures; adhyayana (study), adhyāpāna (teaching) and tadvidyasamḥāsa (discussion with experts) are means for acquiring knowledge.

Chapter three (prakṛtipāda; 11 sūtras): prakṛti is the state of equilibrium (sāmya) and the source of vikṛti; the evolution of the universe (sarga) begins with avyakta and ends with the mahābhūtas; bondage (bandha) arises from samyoga, final liberation (mokṣa) from viyoga; the definition of prakṛti or svāsthya (health); the fourfold contact (yoga) is the cause of happiness and suffering; the foremost object (of medicine) is the protection of health in the healthy; this aim is reached by observation of the prescriptions; the rules concerning the maintenance of health (svasthavṛtta) relate to diet (āhāra), behaviour (ācāra) and activities (ceṣṭā); food, sleep and chastity are the secondary supports (upastambha) of health; those desiring longevity should have recourse to rasāyana; those desirous of progeny should have recourse to aphrodisiacs (vājīkaraṇa).

Chapter four (vikṛtipāda; 13 sūtras): a disorder (vikṛti) is (essentially) a state of disequilibrium (vaiṣamya); the material cause (upādāna) of vikṛti consists of the doṣas, the instrumental cause (nimitta) is formed by the aetiological factors; causes of disorders are asātmendriyārthasamyoga, prajñāparādha and pariṇāma; the stages of therapeutic intervention (kriyākāla) are six in number; a patient should be examined by means of the five senses and interrogation; knowledge about a disease is acquired by means of the nidānapañcaka; drugs should be examined (before use); therapy is the restoration of prakṛti; treatment is like a manual support (hastālambha); therapy is of three types; the attitude of a physician is fourfold; therapy consists of four limbs; a physician should be learned, experienced, pure and benevolent.

Authorities and works quoted or referred to in the commentary are: *Amarakoṣa* (1.6), *Bhagavadgītā* (3.1), *Bhāgavata* (3.10), *Bhāvaprakāśa* (1.19), *Cakradatta* (3.10), *Cakrapāṇi*, Candrapāṇi's commentary on the *Cikitsākalikā* (3.4), *Caraka*, *Ḍaḥaṇa* (1.2, 5, 23, 25, 29; 3.4), Gaṅgādhara's *Jalpakaḥpataṛu* (2.6), *Gītā* (1.23; 2.6; 3.3, 4), *Īśvarakṛṣṇa* (3.2), *Kaṭhapaniṣad* (1.6), *Madhukośa* (4.6), *Muṇḍakopaniṣad* (3.6), *Nyāya* (1.5;

2.6), *Nyāyasūtra* (1.7; 2.2, 5; 3.2), *Praśnopaniṣad* (1.1), *Sāṃkhya* (3.2), *Sāṃkhyakārikā* (1.6), *Sāntarakṣita* (2.6), *Śārngadhara* (1.1 and 27; 4.5), *Sarvadarśanasamgraha* (3.3), *Siddhāntanidāna* (4.6), *Ṣoḍaśāṅgahṛdaya* (1.4), *Suśruta*, *Śvetāśvataropaniṣad* (3.2), *Tattvasamgraha* (2.6), *Vāgbhaṭa*, *Vaiśeṣika*, *Vijayarakṣita* (1.22; 4.2 and 6), *Vṛddhāvāgbhaṭa* (1.29; 4.7), *Yāska's Nirukta* (1.10), *Yogarātnākara* (4.5), and *Yogīndranātha's Carakopaskāra* (2.6).

ĀYURVEDADARŚANA by Nārāyaṇadatta Tripathī.⁴¹ This work, written in 1,233 prose statements in sūtra style, arranged in sixteen chapters, and accompanied by an elaborate Sanskrit auto-commentary, called *Subodhinī*, is mainly concerned with the basic principles of āyurveda and their philosophical foundations; it also deals with anatomy, pathology, the general principles of treatment, and the processes (saṃskāra) to which mercury is subjected before being suitable to be administered as a medicine. The text and its commentary quote from numerous medical authorities, philosophical treatises, kāvyas, Purāṇas, etc. The author repeatedly advances his own views after referring to those of earlier authorities.⁴²

ĀYURVEDADARŚASAMGRAHA by Dāmodar Śarmā Gauṛ.⁴³

ĀYURVEDAPARIBHĀṢĀ, compiled by Paṇḍit D. Gopalacharlu.⁴⁴

ĀYURVEDARATNAMĀLĀ, compiled by Lokanātha Kaviratna.⁴⁵

ĀYURVEDASAMGRAHA by (Vāsiṣṭha) Gaṇapatiśāstrin, styled Kāvyaṇṭha. The author (18.11.1878–25.07.1936), son of Narasiṃhaśāstrin of Kalavarāyī village in Vizagapatam district, Andhra Pradesh, was an adherent and pupil of Ramaṇa Maharṣi of Tiruvaṇṇāmalai.⁴⁶

ĀYURVEDASŪTRA by Rāmaprasāda Śarman is a short treatise in sūtra style, with a Sanskrit and Hindī commentary by the author. It deals, in forty-seven sūtras, arranged in three chapters, with basic āyurvedic concepts.⁴⁷ The author was the father of Paṇḍit Shiv Sharma.⁴⁸ He also wrote the *Rasendrapurāṇa*.⁴⁹

ĀYURVEDAUṢADHARATNĀKARA, compiled by Śrīpāda Kṛṣṇamūrti Śāstrin.⁵⁰

ĀYURVEDĪYA HITOPADEŚA,⁵¹ written by Raṇajitrāya Desāi,⁵² is a compilation from the *Caraka*- and *Suśrutasaṃhitā* with their commentaries, the works of Vāgbhaṭa, the *Śārngadharasaṃhitā*, the *Bhāvaprakāśa*, etc.; it is accompanied by a Hindī commentary. The same author wrote an *Abhinavaśarīrakriyāvijñāna*,⁵³ *Āyurvediyapadārthavijñāna*,⁵⁴ and *Nidānacikitsāhastāmāla*.⁵⁵

ĀYURVEDĪYA OṢADHINIGHAṆṬU by Tayyil Kumāran Kṛṣṇan,⁵⁶ a dictionary containing about 25,000 Sanskrit names of drugs.

ĀYURVEDĪYAPADĀRTHAVIJÑĀNA by Raṇajitrāya Desāi.⁵⁷

ĀYURVEDĪYA-PADĀRTHAVIJÑĀNA by Cintāmaṇi Gaṇeśa Kāśīkar.⁵⁸

This work deals with philosophical concepts and their use in āyurveda. It is divided into four chapters: (1) pramāṇavicāra (1–59), (2) kāryakāraṇabhāvicāra (60–74), (3) prameyavicāra (75–122), and (4) puruṣavicāra (123–134), followed by a pariśiṣṭa on the tantrayuktis (135–155), and one on weights, measures, units of time, etc. (156–169).

Apart from several medical works, numerous philosophical treatises are quoted.

ĀYURVEDĪYA PAÑCAKARMACIKITSĀ, compiled by Mukundīlāl Dvivedī, Tārācand Śarmā, and Bhairava Miśra,⁵⁹ is an extensive compilation of verses and prose passages on pañcakarma from the following sources: *Aṣṭāṅgaḥṛdayasaṃhitā* with the commentaries of Aruṇadatta, Candranandana, Hemādri and Parameśvara, *Aṣṭāṅgasamgraha* with Indu's commentary, *Bhāvaprakāśa*, *Bhelasamhitā*, Cakrapāṇidatta's *Cikitsāsamgraha* with the commentary of Śivadāśasena, *Carakasamhitā* with the commentaries of Cakrapāṇidatta, Jejjāta and Yogīndranāthasena, *Hārītasamhitā*, *Kāśyapasaṃhitā*, *Śārṅgadharasaṃhitā* with the commentaries of Āḍhamallā and Kāśīrāma, *Suśrutasamhitā* with the commentaries of Ḍalhaṇa and Hārāṇacandra, and Vaṅgasena's *Cikitsāsārasamgraha*.

ĀYURVEDĪYAPATHYĀPATHYAVIMARŚA, written by Paramānanda,⁶⁰ is a treatise on dietetics.

ĀYURVEDĪYASĀRĪRA by Gaṇeśaśarman.⁶¹

ĀYURVIJÑĀNARATNĀKARA by Yogendranātha.⁶² This treatise, partly in prose, partly in verse, is divided into four sections (khaṇḍa). The first and longest one, in seven chapters, is concerned with vāyu; the second, in two chapters, with pitta, and the third, in three chapters, with kapha. Chapter one of section four is about combinations of the doṣas, while its second chapter contains a summary of the contents of the book.

The opening chapter gives definitions of āyus, vyādhi, etc. The remaining part of section one is devoted to vāyu and its qualities (chapter two), the types of vāyu, their seats, actions, etc., and the nāḍīs (chapter three), the excitement of vāyu (chapter four), diseases caused by vāyu (chapter five), the general treatment of these diseases (chapter six), and specific remedies against these diseases (chapter seven). The arrangement of sections two and three is analogous to that of section one.

A special feature of the *Āyurvijñānaratnākara* is that it draws its material from a wide range of sources. It quotes not only from the *Atharvaveda*, various Upaniṣads, Tantras, and āyurvedic treatises, but has also been influenced by western medicine. Borrowed from western medical science is, for example, the description of śoṇitocchvāsa (hypertension; I.3.20) and its treatment (I.7, pages 271–272). Other noteworthy features are the attention paid to the system of nāḍīs (I.3), a rather long passage devoted to vāyuparivartana (change of climate; I.3.22), the employment of the term upadāṃśa as an equivalent of syphilis (I.7, page 254) and of aupasargikameha as the equivalent of gonorrhoea (I.7, page 254), the description of a plant, called

svalpacandramūla, as a remedy against insanity (I.7),⁶³ and the use of vernacular terms (I.7, page 273).

Authorities and works quoted are: *Atharvaveda* (I.3.41 and 50), *Bhagavadgītā* (II.1.2; III.1.26), *Bhāvamīśra* (I.2.12 and 27; I.3.20), *Bhāvaprakāśa* (I.3.33), *Bhela* (II.1.17), *Brahmayāmala*⁶⁴ (I.3.78), *Caraka* (passim), *Chāndogyaopaniṣad* (I.3.40, 56, 64, 124), *Ḍalhaṇa* (III.1.18 and 28), *Jatukarṇa* (I.4.19), *Mahābhārata* (I.3.38, 39, 55, 67, 92), *Mūlabhārata* (I.3.31), *Nāḍivijñāna* (I.3.74), *Narapatijayacaryā Svarodaya*⁶⁵ (I.3.78), *Pātāñjaladarśana* (I.3.116), *Prāṇatoṣaṇitantra* (I.3.48),⁶⁶ *Praśnopaniṣad* (I.3.73, 113, 121), *Rāghavabhaṭṭa* (I.3.130),⁶⁷ *Rāyamukuta* (I.3.34, 45, 83, 96, 108),⁶⁸ *Rudrayāmala* (I.3.76), *Sāmkarabhāṣya* (I.3.63),⁶⁹ *Sāmkhyakārikā* (III.1.1), *Śārṅga-dhara* (I.2.17; 3.31) and its *Gūḍhārthāḍīpikā* commentary (by Kāśīrāma; I.3.31), *Śrīmadbhāḡavata* (I.3.39), *Suśruta* (passim), *Tantrasāstra* (I.3.31), *Tattvacintāmaṇi* (I.3.81),⁷⁰ *Triśaṭcārya* (i.e., *Tīsaṭa*; I.4.26), *Vāgbhaṭa* (passim), *Vidvanmanoranjanī*⁷¹ (I.3.122), *Viśvasāratāntra* (I.3.47, 84, 95, 106),⁷² *Yogārṇava* (I.3.46, 66, 68, 85, 91, 98, 103, 107, 115, 120, 125),⁷³ and *Yogiyājñavalkya*⁷⁴ (I.3.37, 49, 69, 86, 99, 109, 131).⁷⁵

BĀLACIKITSĀTANTRA, compiled by Gaurīśaṃkara Śarman.⁷⁶

BHAIṢAJYAMAṆIMĀLIKĀ, compiled by Satyācaraṇa Sena Gupta.⁷⁷

BHĀRATABHAIṢAJYARATNĀKARA, compiled by Rasavaidya Nagīnādāsa Chaganalāla Śāha,⁷⁸ consists of a huge and very useful collection of about 10,000 formulae drawn from numerous sources.⁷⁹ A short chapter at the beginning contains definitions of the five types of kaṣāya and rules for the prakṣepa to be added. The formulae are arranged alphabetically, according to the first akṣara of their name. Those beginning with the same akṣara are listed in a fixed order: kvātha, cūrṇa, guṭikā, guggulu, pāka, avaleha, ghṛta, taila, āsavāriṣṭa, lepa, dhūmra, añjana, nasya, rasa, kalpa, and miśra.

The *Bhāratabhaiṣajyaratnākara* is one of the sources of the *Bhēṣajasaṃhitā* and the *Rasadhātuprakāśa*.

BHĒṢAJASAMHITĀ by Caraṇatūrtha Mahārāja (i.e., Jīvrām Kālidās).⁸⁰ This work consists of a collection of formulae, compiled from a large number of sources, accompanied by explanations in Hindī. The explanations are about the way of preparing the compound drugs, their bhāvanā, dosage, anupāna, and indications.

The treatise is divided into sixteen sections (prakaraṇa) and a pariśiṣṭa. Each section deals with a particular group of pharmaceutical preparations: (1) rasa, rasāyanakalpa (318 formulae); (2) kūpīpakvarasa (25 formulae); (3) parpaṭī, poṭṭalī (33 formulae); (4) lauha, maṇḍūra (57 formulae); (5) bhasman, piṣṭi (77 formulae); (6) guṭikā, guggulukalpa (129 formulae); (7) cūrṇakalpa (100 formulae); (8) añjana, netrayoga (27 formulae); (9) nasya, dhūmayoga, dhūpa (17 formulae); (10) kṣāra, lavaṇa, drava (7 formulae); (11) ghṛta (55 formulae); (12) taila (80 formulae); (13) lepa, malama (53 formulae); (14) kvātha, kṣīrayoga (136 formulae); (15) avaleha, pāka (48 formulae); (16) āsava, ariṣṭa, arka (40 formulae); the pariśiṣṭa section is concerned with the purification of a number of substances (dravyaśodhana), and with weights and measures

(mānaparibhāṣā).

By far the larger part of the formulae are quoted from Sanskrit texts; those borrowed from treatises in Hindī are not reproduced, but summarized.

The sources of the *Bheṣajasaṃhitā* are: *Aṣṭāṅgahrdayasaṃhitā*, *Āyurvedavijñāna* (by Vinodalāla Sena), *Basavarājīya*, *Bhaiṣajyaratnāvalī* (by Govindadāsa), *Bhāratabhāṣajyaratnākara*, *Bhāvaprakāśa*, *Brhadyogatarāṅgiṇī*, *Brhannighaṇṭurātānākara*, *Cakradatta*, *Carakasamhitā*, *Cikitsāpradīpa*,⁸¹ *Dravyaguṇavijñāna*,⁸² *Rasacandāmaṇḍu*, *Rasakāmadhenu*, *Rasāmṛta*, *Rasaprakāśasudhākara*, *Rasarājasundara*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasasaṃketakalikā*, *Rasatantrasāra* or *Siddhapaṇḍitasaṃgraha*,⁸³ *Rasatarāṅgiṇī*, *Rasāyanasāra*,⁸⁴ *Rasayogasāgara*, *Rasendracintāmaṇi*, *Rasendrasārasaṃgraha*, *Rasoddhātatantra*,⁸⁵ *Sahasrayoga*, *Śāringadharasaṃhitā*, *Siddhabhaiṣajyamāṇimālā* (by Kṛṣṇārāma), *Siddhayogasamgraha*,⁸⁶ *Vaidyajiṇa*, *Vaidyayogaratnāvalī*,⁸⁷ *Yogacintāmaṇi*, *Yogaratnākara*, *Yogaśataka* (by Vopadeva),⁸⁸ and *Yogatarāṅgiṇī*.

Jivṛām Kālidās⁸⁹ was born from brāhmaṇa parents in a village called Mevāsā, near Jāmnaṅgar, in 1882/83. After the death of his parents, when he was eight years old, he went to live with a paternal uncle in Goṇḍāl, where he studied Sanskrit with Kevalrām Līlādharaṇī Śāstrī. He moved to Gīrnār in 1903/04 and studied Sanskrit, āyurveda and mantrasāstra with Acyutānand Brahmācārī, with whom he wandered in the Himālayas. After having lived for some time in Bombay, he started a practice in Goṇḍāl, where he founded the Rāsāśālā Auśadhāśrama in 1909/10. The Mahārāja of Goṇḍāl, Bhagavatsimhaḥ Bahādur, appointed him royal physician in 1915/16. Later in life, he became a saṃnyāsīn and changed his name into Caraṇatīrthaḥ Mahārāj.⁹⁰

Jivṛām Kālidās not only wrote the *Bheṣajasaṃhitā* and *Rasoddhātatantra*, but also edited a number of Sanskrit medical texts (*Praśastauśadhasaṃgraha*, *Rasaprakāśasudhākara*, *Vādi- and Rddhikhaṇḍa* of the *Rasaratnākara*, *Vyādhinīgraha*, *Yogatarāṅgiṇī*).

BHĪṢAGBHŪṢAṆA, compiled by Pārthasārathi Kṛṣṇamācārya.⁹¹

BHĪṢAKSARVASVA, composed by Aghoranāthaśāstrin,⁹² who also wrote an auto-commentary on his work.

The first part of the *Bhīṣaksarvasva* consists of 440 verses, arranged in four chapters (adhyaḥ). The treatise is characterized by a mixture of traditional āyurvedic and western medical concepts.

Chapter one (upakramaṇīya) deals with some definitions (jīvita, dhātu, śarīra), the three guṇas and the three doṣas, types of country (deśa), divisions of time, astrology connected with medicine, the seven dhātus, the six tastes, the three doṣas again, and, finally, increase and decrease of the doṣas, dhātus and impurities (mala). Chapter two (śarīravijñānīya) is about anatomy, chapter three (sātrmyarākṣaṇīya) on behavioural rules during the day and the night and during the seasons, and chapter four (janapadoddharaṇīya) on the construction of a house, garden, etc., where one can live healthily. Sources are not referred to.⁹³

The three doṣas and the three guṇas are interconnected: vāta and pitta are composed of sattva and rajas, kapha consists of tamas (1.7–15). The three types of country correspond to the three doṣas: vāta predominates in the pārvatyā,⁹⁴ pitta in the jāṅgala, and kapha in the ānūpa type (1.18–19).⁹⁵ The first five days of a lunar fortnight, called karṣaṇī, are characterized by an increase of vāta and are suitable for śamanī therapeutic measures; the second five, called śoṣaṇī, characterized by an increase of pitta, are suitable for rasāyanī procedures; the third five, called poṣaṇī, characterized by an increase of kapha, are suitable for haraṇī purposes (1.29–33).⁹⁶ Relationships are described between the seven grahas on the one hand, and the three guṇas, the three doṣas, the seasons, and various parts of the human body on the other (1.34–42). Eight chief parts of the body are distinguished: the head, the neck, the two arms, the chest, the belly, the two lateral parts of the chest (pārśva), the back, and the two legs (2.6–23).⁹⁷ The thymus is known to the author.⁹⁸ Voluntary (kāmaṇṛta) and involuntary (svavṛttaka) muscles are distinguished (2.64–68). The kaṇḍarās are described as tendons in the sense of western anatomy (2.80–81). The term dhamanī is used for an artery, śīrā for a vein (e.g., 2.107), srotas for a lymph vessel (2.107–110), snāyu for a nerve (2.111–114). After dealing with anatomy along the lines of the *Suśrutasaṃhitā*, mixed with some modern concepts, Aghoranātha describes the organ systems and their physiology in agreement with western medicine. He explains, for example, the circulation of the blood (rakta-parikrama) and the functions of heart and lungs (2.147–161), mentions the three small cartilaginous bones of the middle ear (2.131–134), the olfactory nerve (2.135–137), the ovaries (dimbakaṣa: 2.219), the Fallopian tubes (karṣikā: 2.219), etc.

Sources quoted in Aghoranātha's auto-commentary are: *Ānandalaharī* (3.21),⁹⁹ *Ātreya* (2.191–192), *Bhānumatī* (3.7), *Bhāvaprakāśa* (often), *Carakasamhitā* (often), *Gāruḍa* (4.4 and 10–11), *Garuḍapurāṇa* (4.16), *Hemacandra* (2.212), *Jayadatta* (2.137–143), *Jyotiṣasaṃhitā* (1.37–38), *Mādhavakara* (1.104), *Nāḍīprakāśa* (2.85), *Nāḍīvijñāna* (2.94–96), *Nandana* (1.26 and 27),¹⁰⁰ *Rājasamgraha* (3.7),¹⁰¹ *Rogavinīścaya* (1.85 and 104), *Śāringadharasaṃhitā* (2.162–163), *Suśrutasaṃhitā* (often), *Vāgbhaṭa* (2.162–163), *vaidyakaśiddhavaṇa* (2.202), and *Viśva* (2.210).

The author was born in Koṇanagara, on the banks of the Ganges. He was a son of Gopālacandra and a pupil of Harinātha.¹⁰²

Aghoranātha completed his *Bhīṣaksarvasva* in 1906/07.¹⁰³

BRHACCHĀRĪRA¹⁰⁴ by Vaidya Ratnam P.S. Vāriyar.¹⁰⁵ Part II is a treatise on osteology in verse and prose, consisting of ten chapters (adhyaḥ): (1) prsthavamaṣavivarāṇa (the vertebral column), (2) śiraḥkapālāvivaraṇa (the flat bones of the cranium), (3) itarakarotiṣṭhivivarāṇa¹⁰⁶ (other bones of the skull, such as the sphenoid: sphīnakāsthī, ethmoid: śivakāsthī, etc.), (4) mukhamāṇḍalāsthivivarāṇa (the bones of face and oral cavity), (5) samastāśiraḥkankālivivarāṇa (a survey of the structures of the head), (6) urosthīpārśukāvivaraṇa (the bones of the thorax), (7) aṃśakravivarāṇa (the bones of the shoulder girdle), (8) uttaraśākhāsthivivarāṇa (the bones of the arms), (9) kaṭīcakraivivarāṇa (the bones of the pelvic region), (10) adhaśākhāsthivivarāṇa (the bones of the legs).

BRHADĀSĀVĀRIṢṬASAMGRAHA by Kavirāj Devasiṃha Viṭṭhal¹⁰⁷ is a collection of 170, alphabetically arranged recipes of āsavaś and aṣṭas.

Sources mentioned are: *Aṣṭāṅghṛdayasaṃhitā*, *Aṣṭāṅgasamgraha*, *Āyurvedasaṃgraha*, *Āyurvedasopāna*,¹⁰⁸ *Bhaiṣajyaratnāvalī*, *Bhāratabhāiṣajyaratnākara*, *Bhāva-prakāśa*, *Cakradatta*, *Carakasamhitā*, *Gadanigraha*, *Rasakāmadhenu*, *Śārṅgadhara*, *Siddhabhaiṣajyamaṇimālā*, *Vaidyakaśikṣā*,¹⁰⁹ *Vaṅgasena*, *Vīrasimhāvaloka*, *Vṛndamādhava*, *Yogacintāmaṇi*, *Yogaratnākara*, and *Yogaraṅgiṇi*.

CIKITSĀNUŚĀSANA by Gaṇapatiśāstrin.¹¹⁰

CIKITSĀPRABANDHASAMUCCAYA by Rāmacandra Śarman.¹¹¹

CIKITSĀSAMGRAHA by Lakṣmīdhara Śarmā.¹¹² This work, written partly in Sanskrit, partly in Hindī, consists of the following chapters: netraparīkṣā, yantracikitsā, mantracikitsā, anupānavyavasthā, tailādhyāya, mūtraparīkṣā, sujākakikitsā, nighaṇṭu, strīroḡādhikāra, vājīkaraṇādhikāra, vīryastambhādhikāra, rasāyanādhikāra, dravyādivyavasthā, śaḍrasavyavasthā, dravyaguṇavyavasthā, dravyavīryavyavasthā, dravya-prabhāvyavyavasthā, dravyavipākavyavasthā, aśvacikitsā, and virecana.

Sources referred to are: Caraka (93; 139), Lolimbarāja (43), Suśruta (149; 172), and Vāgbhaṭa (137; 140; 143; 144; 161; 165; 171).

The *Cikitsāsamgraha* was completed in 1902.¹¹³

Lakṣmīdhara Śarmā was born in Karhal (Maimnapurī district) in 1857. He became a well-known medical practitioner in Maimnapurī, where he founded the Caturvedī Auśadhālaya. He died in 1907. Apart from the *Cikitsāsamgraha*, he wrote the *Ārogya-tāpaddhati* (published in 1901) and *Āhārasamhāra* (published in 1982).¹¹⁴

CIKITSĀTARAṅGIṆĪ, compiled by Dayānidhi Miśra.¹¹⁵

CIKITSĀTATTVAPRADĪPA by B.V. Gokhale.¹¹⁶

CŪRṆACIKITSĀDARPAṆA, compiled by Gaṇapatiśāstrin.¹¹⁷

DEHATATTVA, compiled by Vipinavihārīn Gupta.¹¹⁸

DOṢAKĀRAṆATVAMĪMĀMSĀ by Priyavrat Śarmā.¹¹⁹ This small work, in prose, interspersed with quotations, is concerned with the doṣas and their role in the aetiology of diseases. It is divided into two parts, written in Sanskrit and Hindī respectively.

The Sanskrit part deals with the following subjects: kāraṇatvam, kāryakāraṇabhāvaḥ, kāryasyotpādavināśau, vikāraḥ, doṣavaiṣamyam kāraṇam kāryam vā, doṣāṇām kāraṇatvam, siddhāntaḥ.

The subjects of the Hindī part, corresponding to but not completely identical with that composed in Sanskrit, are: (1): kāraṇatva kā sāmānya vivecan: paribhāṣā, prakār, kāryakāraṇabhāva, kārya kī utpatti aur vināś, svabhāvoparamavād; (2): doṣam kā kāraṇatva: vikār kā svarūp, doṣavaiṣamyam kāraṇ yā kārya, vikār kī utpatti, Vāpyacandra kā mat, Vijayarakṣit kā uttarapakṣa, arvācīn ācāryam kā mat, siddhānt.

Sources quoted are: *Aṣṭāṅghṛdayasaṃhitā*, Cakrapāṇidatta's commentary on the *Carakasamhitā*, *Carakasamhitā*, Dhunḍhirājaśāstrin's ṭippaṇī on the *Vaiśeṣikasūtra*,¹²⁰ Gaṇanāthasena's *Siddhāntanidāna*, Gaṅgādhara's *Jalpakaḷpataru* on the *Carakasam-*

hitā, *Gītā*, *Kārikāvalī*,¹²¹ *Mayūkha*,¹²² *Muktāvalī*,¹²³ *Nyāyabodhinī*,¹²⁴ *Nyāyasūtra*, *Pratibimbaṭikā*¹²⁵ on the *Tarkasamgraha*, *Samkaramiśra's Vaiśeṣikasūtrapaskāra*,¹²⁶ *Sāṃkhyakārikā*, *Suśrutasaṃhitā*, *Tarkasamgraha*,¹²⁷ *Uddyotakara's Nyāyavārttika*,¹²⁸ *Vācaspatiśāstrin's Nyāyavārttikatātparyāṭikā*¹²⁹ and *Sāṃkhyatattvakaumudī*, *Vaiśeṣikasūtra*, *Vāpyacandra*, and *Vijayarakṣita's part of the Madhukośa*.

DRĀVYAGUṆASŪTRA by Priyavrat Śarmā¹³⁰ is a short work in sūtra style on the principles of Indian pharmacology.

Chapter one (padārthaprakaraṇa; 7 sūtras): the subject of the work; the scope of the term guṇa; āyurveda was divided into eight branches by the ancient sages, but is now regarded as consisting of sixteen branches: maulikasiddhānta (basic concepts), śārīra (anatomy and physiology), dravyaguṇa (pharmacology), bheṣajakalpanā (the preparation of medicines), rasaśāstra (iatrochemistry), nidāna (pathology and diagnostics), kāyacikitsā (internal medicine), svasthavṛtta (maintenance of health), mānasaroga (psychiatry), rasāyana (measures conducive to longevity), vājīkaraṇa (aphrodisiacs), agadatantra (toxicology), śalya (surgery), śālākya (the treatment of diseases of the supraclavicular region), kaumārābhṛtya (paediatrics), and prasūtitantra (obstetrics and gynaecology); dravyaguṇa is the foremost among these branches; dravyaguṇa is divided into nāmarūpajñāna (pharmacognosy), guṇajñāna (knowledge concerning the properties of medicinal substances), karmajñāna (knowledge concerning their actions), prayogajñāna (knowledge concerning their applications), yogajñāna (knowledge concerning compound formulae), and kalpajñāna (knowledge concerning the preparation and dosages of kvāthas, etc., medicated ghees and oils, etc.); the seven basic concepts of dravyaguṇa: dravya, guṇa, rasa, vipāka, vīrya, prabhāva, and karman.

Chapter two (dravyaprakaraṇa; 10 sūtras): dravya, the substratum of guṇa and karman, is the samavāyikāraṇa; dravya is divided into āhāra (articles of food) and auśadha (drugs); its sources are of an inorganic (bhauma), animal (jāṅgama) or vegetable (audbhida) nature; vegetable substances are derived from trees (vṛkṣa), creepers and climbers (latā), shrubs (gulma), and herbs (kṣupa); dravyas are śamana (pacifying), kopana (causing excitement of the doṣas) or svasthahita (maintaining a healthy condition); groups (gaṇa) of drugs are those called jīvanīya, etc., vidārigandhādi, etc.; all the dravyas are composed of the five mahābhūtas; each and every dravya may be used as a drug; dravyas are the causes of stability, increase and decrease of the (constituents of the) body; dravya is predominant because it constitutes the substratum of guṇa, etc.

Chapter three (guṇaprakaraṇa; 10 sūtras): guṇa inheres in dravya and is an asamavāyikāraṇa; the guṇas are forty-one in number and are classified as kāyika (somatic), sāttvika (psychic), bhautika (physical) and yaugika (applicable in medicine); the somatic guṇas are arranged in ten pairs of opposites: guru and laghu, manda and tīkṣṇa, śīta and uṣṇa, snigdha and rūkṣa, ślakṣṇa and khara, sāndra and drava, mṛdu and kathina, sthira and sara, sthūla and sūkṣma, picchila and viśāda; they may also be classified according to the predominating mahābhūta: guru, manda, kathina, sthira, sāndra and sthūla are pārthiva; snigdha, drava, śīta, mṛdu, sara and picchila are āpya; uṣṇa and tīkṣṇa are āgneya; rūkṣa, khara and viśāda are vāyavya; laghu, sūkṣma and

ślakṣṇa are nābhāsa in nature; the six psychic guṇas are: icchā, dveṣa, sukha, duḥkha, prayatna and buddhi; the physical guṇas are: śabda, sparśa, rūpa, rasa and gandha; the ten yaugika guṇas are: paratva, aparatva, yukti, saṃkhyā, saṃyoga, vibhāga, prthaktva, parimāṇa, saṃskāra, and abhyāsa; incompatibility may arise from the combination (saṃyoga) of dravyas; saṃyoga, vibhāga, saṃskāra and yukti influence the action of dravyas and determine their strength or weakness; guṇa is important due to its attractive character (ākāṣakatva), resembling that of a rope.

Chapter four (rasaprakaraṇa; 14 sūtras): rasa (taste) is the object of the gustatory sense and has dravya as its substratum; rasa is perceived due to its contact (nipāta) with the sense organ of gustation; the tastes are six in number: madhura, amla, lavaṇa, kaṭu, tikta and kaṣāya; madhura is pāṭhiva and āpya in nature, amla is pāṭhiva and āgneya, lavaṇa is āpya and āgneya, kaṭu is āgneya and vāyavya, tikta is vāyavya and ākāśīya, kaṣāya is pāṭhiva and vāyavya; madhura counteracts vāta and pitta, but increases kapha; amla and lavaṇa increase kapha and pitta, but counteract vāta; kaṭu increases vāta and pitta, but counteracts kapha; tikta and kaṣāya counteract kapha and pitta, but increase vāta; many more actions are attributed to the tastes; madhura, kaṣāya and lavaṇa are guru to a decreasing degree; tikta, kaṭu and amla are decreasingly laghu in the mentioned order; madhura, amla and lavaṇa are in a similar way snigdha; kaṣāya, kaṭu and tikta are rūkṣa, madhura, kaṣāya and tikta are śīta, lavaṇa, amla and kaṭu are uṣṇa in a similar way; lavaṇa, amla and madhura are usually employed to counteract vāta, tikta, madhura and kaṣāya to counteract pitta, kaṭu, tikta and kaṣāya to counteract kapha; anurasa is an unmanifest rasa; rasa is important due to its prominence in practice and because it indicates the nature of a dravya.

Chapter five (vipākaprakaraṇa; 5 sūtras): vipāka is a transformation (parīṇati) of dravya, occurring at the completion of digestion (pākaniṣṭhā); it is of three types according to taste and its effect on the doṣas: madhura, amla and kaṭu; it is of two types according to the guṇas: guru and laghu; madhuravipāka increases kapha, amlavipāka pitta, and kaṭuvipāka vāta; other effects should be noticed too; guruvipāka is bṛṃhaṇa, laghuvipāka is laṅghana; vipāka is important because the good or bad effects of a dravya depend on it.

Chapter six (vīryaprabhāvaprakaraṇa; 9 sūtras): vīrya is śakti, the means of action of a dravya; in practice (vyavahāra), it consists of the active constituents of a substance (kārmukadravyāvayava) in the form of the essence of the mahābhūta(s) present in excess; in pharmaceutical processing, the vīrya is transferred (saṃkrānti) to the medium; vīrya is of six types: guru, laghu, śīta, uṣṇa, snigdha, and rūkṣa, which lead to increase or decrease of the doṣas, and are the basis of the six types of therapeutic procedure;¹³¹ vīrya has the character of guṇa, is manifested by its karman, and has dravya as its substratum; prabhāva is a specific power (śakti); vīrya and prabhāva may be determined from the entry (of a substance) into the body onwards until the end of its stay there; vīrya is important because it is instrumental in the action (of a substance); prabhāva is important due to its specificity and its strength.

Chapter seven (karmaprakaraṇa; 3 sūtras): karman is the cause of saṃyoga and vibhāga, is characterized by activity, and has dravya as its substratum; adhikaraṇa is the site of action; karman is important as the object pursued by physicians.

Chapter eight (auśadhaprakaraṇa; 51 sūtras): auśadha is called thus because it possesses oṣa, which is the same as vīrya; an auśadha should possess rasa, etc., and be suitable (to the particular occasion on which it is used); it should be examined by means of pratyakṣa and anumāna in terms of prakṛti, deśa and kāla; the dosage depends on the disease, the drug itself and the strength of the patient; pharmaceutical preparations are svarasa, kvātha, etc.; the main actions of many single drugs are described (8.6–50); an ideal drug is that one which does not lead to complications.

Chapter nine (samāhāraprakaraṇa; 5 sūtras): sāmānya is the same as tulyārthatva and is the cause of increase, while viśeṣa has an opposite meaning and is the cause of decrease; in general, vipāka overcomes rasa, vīrya overcomes vipāka, prabhāva overcomes vīrya; the more potent property overcomes the less potent one; rasa, etc., exhibit their proper action; a wholesome substance increases the life span, an unwholesome substance reduces it.

Authorities and works quoted or referred to in the auto-commentary are: Agniveśa (2.5), Amara (2.3 and 4; 8.1), Amarakośa (3.7), Aṣṭāṅganighaṇṭu (8.42), Bhāvamīśra (2.7; 8.6, 11, 31, 37), Bhāvaprakāśa (8.9), Cakrapāṇi(datta) (2.2, 5, 6; 3.7; 4.4; 5.1; 6.4; 7.1; 8.3), Cakrapāṇi(datta)'s Āyurvedadīpikā (1.2; 4.13; 8.1), Caraka (passim), Dalhaṇa (2.4; 6.4; 8.31), Dhanvantarinighaṇṭu (8.3), the author's Dravyaguṇavijñāna (1.1; 4.12), Hemādri (3.3), Hemādri's Āyurvedarasāyana (6.4), Madanavinoda (8.6 and 9), Narahari's Rājanighaṇṭu (1.3), Naraharipaṇḍita (2.4), Narasimha's commentary on the Rasavaiśeṣikasūtra (3.1; 4.1; 6.5), Nyāya (1.7), the author's Priyanighaṇṭu (8.13 and 23), rasaśāstra (2.3), Rasavaiśeṣika(sūtra) (1.7; 2.1; 3.1; 4.4; 8.3), Sāṃkhyā (2.7), Sāṃkhyakārikā (3.5), Śivadāsa (5.1; 6.2), Śivadāsa's commentary on Cakrapāṇi's Dravyaguṇa (1.1), the author's Śoḍaśāṅgahṛdaya (1.3; 8.3 and 41), Śrībhagavant (3.10), Suśruta (passim), Tisāṭa (8.48 and 49), Vāgbhaṭa (1.4; 2.5 and 6; 3.3; 4.3; 4.13; 5.1; 6.6; 8.9, 15, 37, 42, 46), Vaiśeṣika (1.7; 7.1; 9.1), Vijayarakṣita (8.10), Vopadeva's Siddhamantraprakāśa (6.1), Vṛddhavāgbhaṭa (6.4 and 6; 8.3 and 10), and Yāska's Nirukta (2.4).

DRAVYAGUṆAVIJÑĀNA¹³² by Yādavaśarman,¹³³ a work in three volumes. Volume I, partly in Sanskrit, partly in Hindī, deals with the basic concepts of pharmacology and explains a large number of technical terms; the Sanskrit passages consist of quotations and comments by the author. Volume II, in Sanskrit and Hindī, is devoted to rules pertaining to the preparation of drugs (paribhāṣā); the Sanskrit passages consist partly of quotations, partly of verses and comments by the author. Volume III, in Hindī, describes the names, properties and actions of numerous medicinal substances.

GADAVINISĀYĀ or Rogajñānakrama by B.L.S. Silva.¹³⁴

INDIAN MEDICINAL PLANTS: A COMPENDIUM OF 500 SPECIES, edited by P.K. Warrier, V.P.K. Nambiar and C. Ramankutty.¹³⁵ The five volumes of this work contain, apart from quotations from numerous nighaṇṭus, also many Sanskrit verses describing medicinal plants employed in Kerala which are absent from other treatises.¹³⁶ These stanzas were probably composed by S. Raghunatha Iyer, on whose research the com-

pendium is based.

Examples of these plants are: anyāmrāgandhā,¹³⁷ aśvakatī,¹³⁸ auddālaka (also called śvānamāra),¹³⁹ bhūlavaṅga,¹⁴⁰ cāmepeya,¹⁴¹ caturāṅgī (also called vanacchedī),¹⁴² chattrī (also called kukkurajihvā),¹⁴³ chāyāparpatikā,¹⁴⁴ dārukanda (also called kalpakanda),¹⁴⁵ dhanavallī,¹⁴⁶ garalaphalā (also called kākamārī),¹⁴⁷ giriśālmalikā,¹⁴⁸ gostanī (also called vanyajātī),¹⁴⁹ hemamālātī (also called caturdhāralatā),¹⁵⁰ kam-samāra,¹⁵¹ kāñcana,¹⁵² kṛṣṇāmlīkā (also called golikā),¹⁵³ latākṣīrī,¹⁵⁴ nikuñjikā,¹⁵⁵ nīlavallī (also called vallīśākhota),¹⁵⁶ nityakalyānī,¹⁵⁷ pratānikā,¹⁵⁸ pūlikā (also called kṛṣṇakāmbhojī),¹⁵⁹ saṭhāmbasthī,¹⁶⁰ sphoṭyābhujāṅga,¹⁶¹ śvetanirviṣā,¹⁶² tāmraka,¹⁶³ tripuṭa,¹⁶⁴ viṣaghnī (also called anādanā),¹⁶⁵ vitāna,¹⁶⁶ and yūthikāpamī.¹⁶⁷

JVARATIMIRANĀŚAKA by Rāmprasād Kyākhūb Caube.¹⁶⁸ This work is a short treatise on fevers and their treatment, in Sanskrit verse and Hindi prose.

Chapter one (13 verses) is of an introductory nature; chapter two (7 verses) discusses fever in general; chapter three (63 verses) deals with the general treatment of fevers; chapter four (156 verses) is about the types of fever and their treatment; chapter five (45 verses) contains a number of prescriptions (rasas, pākas, etc.).

Sources are not mentioned.

The Hindi parts are strongly influenced by Yūnānī and western medicine. On some occasions, Kyākhūb, who calls himself a hakīm, gives answers to questions put by Gaurīśaṅkar Caube.¹⁶⁹

KĀYACIKITSĀ, compiled by Satyācaraṇa Sena Kavirañjana.¹⁷⁰

LAṢMĪMODATARAṅGIṆĪ by Gaṇeśadatta Śāstrin¹⁷¹ is a work of about 800 verses, arranged in four chapters (taraṅga).

Chapter one gives a detailed genealogy of the author; it also tells about his studies and the composition of his book, completed in 1930. Chapter two is concerned with the rules for a healthy life (svasthavṛtta), chapter three with the regimen to be observed during the various seasons (ṛtucaryā). Chapter four, the longest one, divided into thirty-four adhikāras, deals with the treatment of diseases and consists mainly of recipes. A shorter version of the author's genealogy closes the work. The order of the diseases agrees with that of the *Mādhavanidāna*. The sources of some formulae are given in footnotes.¹⁷²

The *Lakṣmīmōdataraṅgiṇī* mentions a large number of drugs that are rare or unknown in earlier works. Unusual names of medicinal substances are employed. Borrowings from Islamic and western medicine are also met with. Examples are:¹⁷³ abhala (94),¹⁷⁴ anisuka (65),¹⁷⁵ dārusitā (25; note: = dālacinī), iśāvagola (21),¹⁷⁶ jarāvinda (89),¹⁷⁷ jūphā (53),¹⁷⁸ kāhū (50),¹⁷⁹ kākodara (33; note: = ahiphena), kālasorakṣāra (45), kāsinī (25),¹⁸⁰ kavāvakhannā (52),¹⁸¹ khatamī (52),¹⁸² koṣaphala (92; note: = kavāvacinī), kusā (49; note: = gojihvā), madaṅgī (30; note: = mastagī), naraśaṭhī (72),¹⁸³ niṣphena (33; note: = ahiphena), pāṣānakola (104), pharaphendu (21; note: = gavākṣī), picchāphala (52), podīna (71),¹⁸⁴ puṣpakanda (31; note: = gulakanda), revantakāṣṭha (88),¹⁸⁵ sanāmikā (88; note: = sanāya),¹⁸⁶ saṅgayasava

(67),¹⁸⁷ śrīkṛṣṇabīja (81),¹⁸⁸ ustakhaddūsa (25),¹⁸⁹ and yākūta (67).¹⁹⁰

MĀDHAVANIDĀNAPARIŚIṢṬA by Brahmasaṅkara Śāstrī.¹⁹¹

MĀDHAVANIDĀNAPARIŚIṢṬA by Dīnanātha Śarmasāstrin, an appendix to the *Mādhavanidāna*,¹⁹² describing, in Sanskrit, a long series of diseases only found, for the largest part, in more recent āyurvedic literature: mantharakajvara (enteric or typhoid fever), granthikajvara (bubonic plague), vātsālaismikajvara (influenza), sandhikajvara (rheumatic fever), śvasanakajvara (pneumonia), ākṣepakajvara (cerebrospinal fever), daṇḍakajvara (dengue), karṇamūlikajvara (mumps), mālājvara (Malta fever), kālajvara (kala azar), aupasargikavisūcikā, urastoya (pleurisy), phupphusāvaraṇapradāha (dry pleurisy), smaromāda, bhramomāda, mahāgada, vṛkkaroga, agnyāśayaroga, tāntavikaroga, cullikāgranthiroga (diseases of the thyroid), klāibya, śukradoṣa, śukrameha, ojomēha, somaroga, mūtrātisāra, vandhyārōga, jarārōga, upāntraśoṭha (appendicitis), hṛdyantraroga,¹⁹³ pāradaroga, āgantukapakṣāghāta, śaiśavasamnyāsa, yoṣāpasmāra, upadaṁṣa, sahaṇopadaṁṣa, bhr̥ṣṇāṇavāta (gonorrhoea), am̐sughāta (sunstroke), and śitalā.

MAHĀYOGĀNANDĀMṚTAKALPAVALLĪ by Venkaṭasimhādri Jagapati Rāju, a work in verses derived from various sources.¹⁹⁴

NAPUṢSAKĀMṚTĀRṆAVA by Rāmaprasāda.¹⁹⁵ This work, a monograph on disorders of male sexual potency and their treatment, written in the form of a dialogue between a teacher and his pupil, is arranged in nine chapters (taraṅga): (1) napuṣsakanidānavarṇana (102 verses); (2) napuṣsakacikitsita (101 verses); (3) vājīkaraṇādicūṇnavarṇana (67 verses); (4) kāmōddīpakapākavarṇana or vājīkaraṇapākavarṇana (106 verses); (5) guṭīkārasādivarṇana or vājīkaraṇarasādivarṇana (115 verses); (6) tailasekalēpādivarṇana or dhvajavikāranāśakatailādivarṇana (94 verses); (7) napuṣsakakāraṇatvena pramehavarṇanam (76 verses); (8) napuṣsakatve kāraṇatvena upadaṁṣaphiraṅgavarṇanam (56 verses); (9) uttamavājīkaraṇasāyanayogavarṇana (66 verses).

Impotence (klāibya) is of seven main types (1.32): of mental origin (mānasa; 1.34); caused by pitta, provoked by the excessive ingestion of substances of a pungent, sour and salty taste (1.35); caused by a deficient amount of semen (śukrakṣaya; 1.36); caused by the application of substances thought to increase the size of the penis (1.37); caused by damage to the ducts transporting the semen (śīrācheda; 1.38); caused by retention of the seminal discharge (vīryastambhanimitta; 1.39); of hereditary origin (janmaprabhṛti; 1.40). Other types are those finding their origin in damage to the semen (bījopaghāta; 1.45–47), damage to the penis (dhvajabhaṅga; 1.48–60), old age (jarā; 1.61–64), various types of weakness (kṣaya; 1.65–70), and bad habits (kukarman; 1.71–73). The opinion of Yūnānī physicians (yāvanīyamata) on the aetiology of impotence is briefly described, according to information derived from Caube who lived in Mathurā (1.74–79). The classification of sexual disorders, as found in the *Suśrutasaṁhitā*, is also incorporated (1.80–88). The characteristics of curable and incurable types

of impotence are mentioned (1.89–91). The varieties of śukradoṣa are described (1.92–98).

Chapter two describes the treatment of impotence. Drugs suitable to this end (vṛ-ṣya) are of three types: śukrasrutikara (promoting ejaculation), śukravivardhana (increasing the amount of semen) and srutivṛddhikara (increasing the amount of ejaculated semen; 2.21).

Chapter three deals with powders (cūrṇa), chapter four with pākas, chapter five with pills (guṭikā) and rasas, useful for the treatment of impotence. Chapter six is concerned with oils (taila), fluids (seka) and unguents (lepa) suitable to the same purpose.

Chapter seven describes prameha, a disease leading to impotence, and the treatment of this disorder. The verses on the aetiology, symptoms, etc., of prameha are related to those found in the *Mādhavanidāna*.¹⁹⁶

Chapter eight deals with upadāṃśa and phiraṅga as causes of impotence, and the treatment of these diseases. The verses on upadāṃśa may be from the *Mādhavanidāna* again,¹⁹⁷ while those on phiraṅga are from the *Bhāvaprakāśa*.¹⁹⁸

Chapter nine contains some formulae for vājikaraṇa and rasāyana purposes.

Some recipes are ascribed to particular authorities: the Aśvins (2.70–72: mahā-sugandhitaila; 9.39–50: mahākalkarasa), Dhanvantari (3.33–38: kāmādevacūrṇa), Vṛkodara (= Bhīma; 2.57–58: a rasālā), and a maternal uncle of the author, called Keśavānanda (8.34–42: uśāvāleha).

The treatise was completed in 1908/09 (9.65).

NAVAPARIBHĀSĀ by Upendranāthadāsa.¹⁹⁹

NAYANĀNANDABODHANĪ by Kālicaraṇa, son of Rāmanidhi.²⁰⁰ This work deals with the treatment of eye diseases.

NIDĀNACIKITSĀHASTĀMALAKA²⁰¹ by Rājajitrāya Deśāi²⁰² is a textbook of pathology in nine chapters, partly in Sanskrit, partly in Hindi. The Sanskrit passages consist of quotations.

NITYOPAYOGIKVĀTHASAMGRAHA by Badrīnārāyaṇa Śarmā.²⁰³

PĀCANA AND MUṢṬĪYOGA, compiled by Nagendranātha Sena Gupta.²⁰⁴

PĀCANASAMGRAHA, compiled by Haralāla Gupta.²⁰⁵

PADĀRTHAVIJÑĀNA by Satyanārāyaṇaśāstrin²⁰⁶ is a work in prose on a number of philosophical concepts and their application in medicine. The concepts dealt with are: padārthatva (1–20), dravya (21–31), prthivī (31–34), jala (34–35), tejas (35–37), vāyu (37–38), ākāśa (39–40), kāla (40–42), diś (42–44), guṇa (44–51), rūpa (51–54), rasa (54–56), sparśa (56–58), sāmkyā (58–61), parimāṇa (61–64), prthaktva (64–65), saṃyoga (65–69), vibhāga (69–75), paratvāparatva (75–78), buddhi (78–83), svapna (84–103), vidyā (103–146), pratyakṣa (146–168), and anumāna (168–192).

Authorities and works quoted or referred to are: Annaṃbhaṭṭa's *Tarkasamgraha* (52, 106, 173, 174, 175, 177, 184), *bauddhagrantha* (122), *bauddhāḥ* (121, 131,

141), *Bharadvājasamhitā* (16), *Bhāṣya* (4, 121, 187, 191),²⁰⁷ Bhūṣaṇakāra (10),²⁰⁸ Cakra(pāṇi) (17, 47), Caraka (15, 16, 18, 20, 109, 114),²⁰⁹ Cintāmaṇi(kṛt) (129, 172, 173, 177),²¹⁰ Darpaṇakāra (9),²¹¹ Dharmarājādharīndra's *Vedāntaparibhāṣā* (107),²¹² Dīdhitikṛt (101),²¹³ *Dinakarī* (50),²¹⁴ *Ekākṣarakoṣa* (9),²¹⁵ Gadādhara(bhaṭṭa) (5, 98),²¹⁶ Gaṅgādhara (45),²¹⁷ Gautama or Gotama (5, 8, 19, 81, 115, 116, 171, 190, 191), Hari (4), Jagadīśa's *Śabdaśaktiprakāśikā* (112),²¹⁸ *Jalpakaḥ* (46),²¹⁹ Jaṭādhara (19), Jayantabhaṭṭa's *Nyāyamañjarī* (116, 134, 135, 137, 138, 140, 168, 169, 181, 182),²²⁰ Kaṇāda's *Vaiśeṣikasūtra* (4, 11, 103, 104),²²¹ *Kaṇādarahasya* (52),²²² Kapila (19),²²³ *Kārikā* (10),²²⁴ *Kārikāvalī* (52),²²⁵ kavayaḥ (3), *Kāvyaaprakāśa* (7),²²⁶ *Madhyamikakārikā* (124),²²⁷ *mādhyaṃkāḥ* (121, 122, 131), *Mādhyaṃkavṛtti* (124),²²⁸ *Mahābhārata* (166), *Maharṣisūtra* (192),²²⁹ *Mañjūśā* (3),²³⁰ *mīmāṃsākāḥ* (6, 7, 9, 10, 18, 105, 111, 147, 152, 175, 176), Nāgeśadīkṣita (2),²³¹ *naiyāyikāḥ* (6, 7, 8, 9, 19, 57, 109, 147, 186), *navināḥ* (169), *navyāḥ* (4, 20, 39, 52), *navyanaiyāyikāḥ* (17), Nīlakaṇṭha's commentary on the *Mahābhārata* (165, 166), *Nyāya(darśana, -sūtra)* (19, 31, 78, 94, 108, 186),²³² *Nyāyalīlavatikṛt* (107),²³³ *Nyāyasiddhāntamañjarī* (6),²³⁴ *Pañcadaśikṛt* (164),²³⁵ Pāṇini (5), *pāṇijalāḥ* (109), *Pāṇijali* (15, 20–21, 44),²³⁶ *Prabhākara* (10, 11, 106),²³⁷ *prābhākaraḥ* (108), *prācīnāḥ* (174), *Prāñca* (2, 52, 53), *Prāśastapāda's Bhāṣya* (very often),²³⁸ *Rāmāyaṇa* (150), Śālinātha's *Prakaraṇapañcikā* (106),²³⁹ *Sāṃkhya* (78, 114, 167), *sāṃkhyāḥ* (18, 161, 164), *Sāṃkhyatattvakaumudīkṛt* (163, 165, 166),²⁴⁰ *Śaṃkaramiśra* (11, 30, 41, 68, 106),²⁴¹ *Sāramañjarī* (7),²⁴² *saṃgatāḥ* (121, 135), *sautrāntikāḥ* (121, 129, 130), *Śiromaṇi* (101),²⁴³ Śrīdhara's *Nyāyakandālī* (61, 68, 74, 82, 87, 106, 133, 141, 170),²⁴⁴ *śruti* (93, 94), *Sūktikāra* (49),²⁴⁵ *Suśruta* (15), *Sūtra* (188, 189, 190, 192), *Sūtrakṛt* (170, 178, 190, 191), *Tarkamīta* (52),²⁴⁶ *Udayana's Kirāṇāvalī* (11, 38, 40, 42, 61, 64, 69, 80, 81, 86, 96, 101, 104, 106),²⁴⁷ *Upaskāra* (42, 46),²⁴⁸ *Vācaspatimiśra* (5),²⁴⁹ *Vahniveśa* (16, 46),²⁵⁰ *vaibhāṣikāḥ* (121, 130, 131), *Vaiśeṣika(sūtra)* (11, 17, 31, 77, 103, 104, 108),²⁵¹ *vaiśeṣikāḥ* (17, 19, 20, 46, 47, 57, 109), *vaiyākaraṇāḥ* (3, 5, 9), *Vardhamānopādhyāya's Kusumāñjaliprakāśa* (42, 164),²⁵² *Vātsyāyana's Bhāṣya* (82, 183),²⁵³ *Vedānta* (20, 124), *vedāntināḥ* (89, 93, 147, 158, 164), *Viśvanātha's*²⁵⁴ (33, 171, 184, 190, 191) *Kārikā* (40, 66), *Muktāvalī* (1, 4, 9, 11, 27, 31, 32, 40, 104, 105, 109, 114, 143, 145, 146, 174), *Samgraha* (44), and *Vṛtti* (184, 187, 191), *vṛddhāḥ* (111), *Yasomitra* (129),²⁵⁵ *Yogabhāṣya* (157), *Yogācāra* (97, 124, 129), *yogācārāḥ* (121, 123), and *Yogasūtra* (12, 148).

PAÑCABHŪTAVIJÑĀNA by Upendranāth Dās.²⁵⁶

PAÑCALAKṢAṆANIDĀNA by Duraisvāmin Aiyangār.²⁵⁷

PARIBHĀSĀPRABANDHA by Jagannāthaprasāda Śukla.²⁵⁸

This treatise, written in Sanskrit and Hindi, consists of fifteen chapters (prakaraṇa). Subjects dealt with are: weights and measures, pharmaceutical preparations, groups of drugs, prepared dishes, actions of drugs, the saṃskāras of rasaśāstra and other alchemical subjects, pañcakarma, etc.

PRAMEHACIKITSĀMAṆI by P. Rāmacandra Rāvu.²⁵⁹

PRAMEHADUHKHABHAÑJANA, compiled by Sītārāma Joṣī, son of Gopīrāma.²⁶⁰
PRĀNATOṢAṆA by Gaṇapatiśāstrin.²⁶¹

PRATĀPAKAṆṬHĀBHARAṆA²⁶² by Kavirāja Pratāpasimha,²⁶³ in 602 verses, is a work consisting mainly of maxims relating to a virtuous way of life; part of the verses are on svasthavṛtta.

PRATYAKṢAŚĀRĪRA²⁶⁴ by Gaṇanāthasena²⁶⁵ is an illustrated textbook of modern anatomy in Sanskrit prose.²⁶⁶ Numerous new technical terms, coined by the author, are found in this work.

The *Pratyakṣa(śārīra)* is quoted in Gaṇanāthasena's commentary on his own *Siddhāntanidāna*.

PRIYANIGHAṆṬU²⁶⁷ by Priyavratā Śarman²⁶⁸ is a work on the names and properties of a large number of medicinal plants. Noteworthy are the descriptions of plants found in this treatise. The 638 verses, composed by the author himself, are couched in an elegant Sanskrit. The work is divided into four chapters (varga): haritakyādivarga (251 verses; 115 items), pippalyādivarga (80 verses; 38 items), śatapuspādivarga (213 verses; 114 items), and dravyādivarga (94 verses). Chapter four does not describe drugs, but deals with the basic concepts of pharmacology and defines a series of actions of drugs. The botanical name of each plant described has been added by the author.

Noteworthy items are: ākārakarbha (3.52),²⁶⁹ arkaparṇī (2.29),²⁷⁰ aśvagola (3.64),²⁷¹ bhūduḡdhikā (3.127),²⁷² dārusitā (1.88–91),²⁷³ dvipāntaravacā (3.51),²⁷⁴ gorakṣa (1.215),²⁷⁵ gorakṣagañjā (3.87),²⁷⁶ haimavatī (3.48),²⁷⁷ jayapāla (3.60),²⁷⁸ karañjadvaya²⁷⁹ and -traya²⁸⁰ (1.214), kṛṣṇabīja (3.63),²⁸¹ kulañjana (3.49–50),²⁸² māyāphala (3.80),²⁸³ nāhī (3.138),²⁸⁴ nālukā (1.88–91),²⁸⁵ two types of pañcatikta (1.183–184), parṇayavānī (3.17),²⁸⁶ pūtiḥā (3.23),²⁸⁷ sadampuspā (3.211),²⁸⁸ somakalpa (3.129),²⁸⁹ svarṇapattrī (3.62),²⁹⁰ tuvaraka (1.132),²⁹¹ vacācatuṣṭaya (3.44),²⁹² vana-trapusiḥā (3.212),²⁹³ and yavānītrita (3.16).²⁹⁴

The *Priyanighaṇṭu* is quoted in the auto-commentary on the author's *Dravyaguṇasūtra*.

PŪTANĀŚĀNTI by Śivamaṅgala Dvivedin.²⁹⁵
RĀJAYAKṢMĀ by Viśveśvaradayālu Vaidyarāja.²⁹⁶

RĀMANIDĀNA or *Rāmarddhisāra* by Rāmalāla.²⁹⁷ This treatise deals with nidāna in 712 verses. The author was a Jain monk, living in Bikaner, and belonging to the Jina-dattasūri śākhā of the Kharataragaccha; he was a pupil of mahopādhyāya Dharmaśīla.²⁹⁸

ROGAVINIŚCAYA by Yāminībhūṣaṇa Rāya.²⁹⁹

ROGIMṚTYUVIJÑĀNA by Mathurāprasāda Dīkṣita,³⁰⁰ a treatise on ariṣṭas (signs indicating the approach of death in a patient).

The work is divided into ten chapters (adhyāya): (1) sixty-four verses on generalities concerning ariṣṭas (3–14) and ariṣṭas pertaining to observations of the physician; (2) twenty-four verses on ariṣṭas pertaining to experiences of the patient; (3) fifty-seven verses on inauspicious dreams and changes in the chāyā; (4) thirty-seven verses on various ariṣṭas; (5) forty-five verses on various ariṣṭas; (6) eighteen verses on ariṣṭas indicating that the patient will die very soon; (7) twenty-seven verses on ariṣṭas indicating death within a specified period of time; (8) fifteen verses on omīna relating to the messenger; (9) thirteen verses on omīna occurring on the way of the physician to the patient's house and on entering it; (10) thirty-two verses on auspicious dreams.

Sources mentioned are Caraka, Suśruta, Vāgbhata, and the *Bhāvaprakāśa* (1.2).

SAMJÑĀPĀNCAKAVIMARŚA by Gaṇanāthasena.³⁰¹ The author discusses in this work the meaning of the terms (1) peṣī and snāyu, (2) kalā, (3) sirā and dhamanī.

ŚĀRĪRAPARIBHĀṢĀ by Gaṇanāthasena.³⁰²

ŚĀRĪRATATTVADARŚANAM NĀMA VĀTĀDIDOṢAVIJÑĀNAM by Puruṣottam Śāstrī Hirlekar and Harihar Śarmā.³⁰³

ŚĀRĪRAVIJÑĀNA, compiled by Niśikānta Vaidya Śāstrin.³⁰⁴
SARVAUṢADHIPADĀRTHADARPAṆA, compiled by M. Vīrayyasiddhāntin.³⁰⁵

ŚATKARMAŚĀSTRA by Jagadīśācārya.³⁰⁶

This interesting treatise, in Sanskrit sūtras, accompanied by a Sanskrit commentary, deals with six basic therapeutic procedures.

The work is divided into sixteen chapters (mayūkha): (1) karmasamkhyāvijñānīya (14 sūtras); (2) trividhadoṣāpattivijñānīya (34 sūtras); (3) pūrvakarmavijñānīya (26 sūtras); (4) sarvakarmavidhivijñānīya (53 sūtras); (5) sarvakarmakramavijñānīya (11 sūtras); (6) samyaksnigdhatvādīlakṣaṇavijñānīya (32 sūtras); (7) sarvakarmavyāpattaccikitsāsūtravijñānīya (12 sūtras); (8) karmayogyāyogavijñānīya (19 sūtras); (9) snehabhedasnehanavidhivijñānīya (40 sūtras); (10) svedanabhedasvedanavidhisūtravijñānīya (19 sūtras); (11) vamanavirecanadravya-tadvidhāna-vega-bala-śuddhi-virecanabhedavijñānīya (35 sūtras); (12) prāṇasvarūpabastikarmavijñānīya (71 sūtras; this chapter is the mayūkharāja); (13) nasyakarmavijñānīya (18 sūtras); (14) raktamokṣaṇabhedatadvidhānavijñānīya (16 sūtras); (15) uttarabastivijñānīya (19 sūtras); (16) sarvakarmāṣeṣavidhivijñānīya (108 sūtras; this chapter is the mahāmāyūkha).

Chapter one defends the unorthodox thesis that not five, but six basic therapeutic procedures should be recognized: vamaṇa (emesis), virecana (purgation), nasya (the application of errhines), anuvāsana (oleaginous clysters), nirūhaṇa (non-oleaginous clysters), and visrāvaṇa (bloodletting). The view that the five procedures, usually called pañcakarman, are sufficient is rejected. The author also refutes the opinion that pañcakarman consists of vamaṇa, virecana, basti, nasya and raktamokṣaṇa, because this would imply that anuvāsana and nirūha have the same effects. A third theory,

holding that snehana, svedana, virecana, basti and visrāvaṇa constitute pañcakarman, is just as little acceptable, because snehana and svedana belong to pūrvakarman, i.e., procedures preceding those belonging to pañcakarman.

Chapter two deals with the following topics: śaṭkarman should only be resorted to when laṅghana, followed by dīpana and pācana, have proved unsuccessful (2.2–4); śaṭkarman is effective against sroto'varodha (blockage of channels) (2.5), the essential feature of which is khavaigunya (2.6); kha (= ākāśa) is never subject to disorders, due to its subtleness (saukṣmya) (2.7); khavaigunya is actually caused by the paramāṇus of the other four mahābhūtas, mixed with those of kha; khavaigunya is therefore an upalakṣaṇa and denotes a svadharmakarmavaigunya of the channels (srotas) (2.8); khavarodha is therefore essentially sroto'varodha (2.9); the finest channels are called caramasrotas (2.10); an intermediate group, called madhyasrotas, consists of the channels called keśikā,³⁰⁷ sirā and dhamanī, together with those transporting lasikā, rasa, śukra, sveda, pitta, mūtra, śvāsa, etc. (2.11–12); the big channel stretching from the lips to the anus is the mahāsrotas (tractus digestivus) (2.13); it is divided into seven parts: annanālikā (oesophagus), āmāśaya, grahaṇī, ubhayāntara (small and large intestine), malāśaya (rectum) and guda (anus) (2.14); the channel carrying śvāsa (tractus respiratorius) consists of: nāsā (nose), āśya (oral cavity), svarayantra (larynx), mahāśvāsapraṇālī (trachea), śvāsapraṇālī (bronchi), śvāsamandira (the alveoli), and śvāsakoṣṭha (the pleura) (2.15); the channel carrying mūtra (urine) consists of: mūtraṇonaka, mūtrakulyā (the tubuli), mūtrakōṣṭha, the two mūtragavīnīs (ureters), mūtrāśaya (bladder), śiśna (penis), and śiśnaveṣṭana (prepuce) (2.16); the channel carrying śukra (seed) consists of: śukraṇonaka, śukrakulyā, śukrakoṣṭha, śukrapraṇālī (funiculus spermaticus or ductus deferens), śukrāśaya (glandula vesiculosa?), aṣṭhīlā (prostate), and śiśna (penis); in females, the yonikalās take the place of the śukrāśaya (2.17); the other channels are divided similarly (2.18); according to modern science, the structures called caramasrotas are the same as the chīdras of the seven dhātus (2.19); this view is rejected (2.20–21); the development of sroto'varodha is discussed; the concept of vṛddhi of the doṣas is explained; excessive vṛddhi leads to sroto'varodha (2.22–24); local vṛddhi can be cured by means of laṅghana (2.25); prakopa and prasara are dealt with (2.26–27), followed by the circulation (caṅkramaṇa) of blood and rasa (2.28); sthānasamśraya is the stage in which the prodromes appear (2.29); vyakti is the stage in which the symptoms appear (2.30); samprāpti (2.31) and bheda (2.32) are discussed; neglect of these pathogenetic processes results in conditions necessitating treatments belonging to (śaṭ)karman (2.33–34).

Chapter three deals with: vamaṇa and nasya are indicated in kapha disorders, virecana in pitta disorders, nirūhaṇa and anuvāsana in vāta disorders (3.1–3); the seats of kapha, pitta and vāta (3.4–7); the aim of (śaṭ)karman consists of the elimination of the doṣas after making them collect in the koṣṭha (3.8–13); the doṣas can only be brought to the koṣṭha in a fluid state (3.14); fluidity is brought about by svedana (3.15–16), but completion of this process requires snehana, which results in mārḍava (softening), vighaṭana (breaking apart) and vilayana (liquefaction) (3.17–18); the dosis of sneha should be increased in disorders caused by blood (3.19–22); dīpana and pācana measures (3.23); the sneha used in snehana should always be prepared by mṛdupāka (3.24);

dīpana and pācana are, according to some, procedures belonging to pūrvakarman (3.25–26).

Chapter four is about general rules for dīpana, pācana, svedana, snehana, nirūha, anuvāsana and raktamokṣaṇa.

Chapter five gives a summary of the six procedures and their order.

Chapter six deals with: the signs indicating that the patient has properly been treated with snehana (6.1–2); the signs of inadequate and excessive snehana (6.3–4); the same groups of signs regarding svedana (6.5–7), vamaṇa (6.8–11), virecana (6.12–14), the application of nirūhaṇa (6.15–17), anuvāsana (6.18–20), nasya (6.21–23), visrāvaṇa (6.24–26), uttarānuvāsana (6.27–29), and uttarāsthāpāna (6.30–32).

Chapter seven is concerned with vyāpad. No conditions called vyāpad arise due to dīpana and pācana (7.1). The vyāpads of snehana are enumerated and their treatment is discussed (7.2–3), followed by those of svedana (7.4–5), vamaṇa and virecana (7.6), nirūha (7.7), anuvāsana (7.8), nasya (7.9), visrāvaṇa (7.10), and uttarabasti (7.11). The last sūtra deals with the relationships between the vyāpads and the doṣas (7.12).

Chapter eight discusses indications and contra-indications for snehana, etc.

Chapter nine deals with: dīpanapācana is of two kinds: external (bāhya) and internal (ābhyantara) (9.1); the external type consists of vyāyāma, dhāvana (running), etc., the internal type of kṣāras (caustics), lavaṇas (salts), and all procedures which rouse pitta (9.2–3); snehas are either sthāvara or jaṅgama (9.4); the sthāvara snehas are oils from various plants, the jaṅgama ones consist of ghee, milk, dadhi, fresh butter, muscle fat, and bone marrow (9.5–6); seeds, etc., are the sources of oils (9.7); oils should be administered in the rainy season, ghee in the autumn, muscle fat and bone marrow in the month of Mādhava (9.8); the relationships between these fatty substances and the doṣas (9.9); ghee, and medicines prepared with it, are the very best (9.10); yet, when vāta is very strong, an oil is to be prescribed, etc. (9.11); or, as an alternative, a ghee, etc., prepared with drugs counteracting vāta, etc. (9.12); these snehas should be administered when it is neither too hot nor too cold (9.13); or, when the weather is hot, during the night, and, when the weather is cold, during the day; a sneha has to be administered when the sky is cloudless (9.14); disorders arising when these rules are not observed (9.15–16); a yūṣa should be drunk after the administration of an oil, tepid water after a ghee, a peyā should be given after the administration of muscle fat, a maṇḍa after bone marrow (9.17); or, after a sneha of whatever type, tepid water should be drunk, not once, but repeatedly (9.18); cold water is the required drink (anupāna) after the oil of tuvaraka or bhallātaka (9.19); the dose of the sneha depends on the activity of the digestive fire; three grades are distinguished: persons digesting the sneha within six, twelve or twenty-four hours (horā) have a sluggish, moderately active or keen fire (9.20); the required doses are half a pala, three quarters of a pala, and a pala respectively (9.21); the smallest dose is the best one (9.22); the treatment should be continued for three, five or seven days, depending on the type of koṣṭha of the patient: mṛdu, madhya or krūra (9.23); snehana is of two types: internal or external (9.24); the internal type consists of acchapeya and vicāraṇā (9.25); the external type consists of lepa, abhyaṅga and udvartana (9.26); the physicians of Kerala add pādāghāta as a fourth type (9.27);³⁰⁸ one dose is drunk in acchapeya (9.28); taking a sneha together with boiled rice or other

substances is called vicāraṇā (9.29); twenty-four varieties of vicāraṇā can thus be distinguished (9.30); vicāraṇā is suitable to those disgusted by a pure sneha (9.31); doses which are too small or too large should be avoided (9.32); a sneha to which a salt has been added acts quickly (9.33); the sneha is not yet digested when the eructations are smelling (9.34), but digested when they are devoid of smell (9.35); when the procedure leads to a very strong activity of the digestive fire, the patient should only drink cold water; otherwise, he would die (9.36); a ghee should never be given pure, but always prepared (with drugs) (9.37–38); even a prepared ghee should never be prescribed in a pitta disorder (9.39); such a disorder requires a combination of two, three or four kinds of sneha (9.40).

Chapter ten deals with: the two groups of sveda: with the help of fire (agnisveda) or without it (10.1); the ten types of sveda without the use of fire: vyāyāma (physical exercise), uṣṇaḡṛha (a warm room), guruprāvaraṇa (warm clothing), kṣudhā (hunger), bhaya (fear), krodha (anger), āhava (fighting), ātapa (the warmth of the sun), bahupāna (drinking much), and upanāha (poultices) (10.2); these types are suitable to delicate persons and when pitta disorders are present (10.3); sveda by means of fire consists of tāpa-, upanāha-, drava-, ūṣma-, and bāśpasveda (10.4); tāpasveda is divided into prastara- and saṃkarasveda (10.5); the materials to be used for the piṇḍas of tāpasveda in disorders caused by kapha and vāta (10.6); the materials for upanāhasveda and its technique (10.7); dravasveda, consisting of avagāha and pariṣeka, is indicated in disorders where pitta predominates, in combination with either vāta or kapha (10.8); the types of ūṣmasveda are: holāka-, kūpa-, kuṭī-, karṣu-, and jentākasveda (10.9); the types of bāśpasveda are: nāḍī-, kumbhika-, āsmaghana-, and bhūsveda (10.10); the fourteen types of agnisveda are indicated in vāta and kapha disorders (10.11); sveda may be applied to the whole body or a part of it (10.12); sveda is either rūkṣa or snigdha; rūkṣasveda, carried out by means of heated stones, sand, etc., is indicated in kapha disorders; snigdhāsveda, consisting of prastarasveda, avagāha, etc., is indicated in vāta disorders (10.13); when a doṣa has moved to the seat of another doṣa, the doṣa normally seated there should be counteracted first, subsequently the doṣa that has moved (10.14); sveda is of three types, divided into strong, moderate and weak sveda (10.15); weak sveda should be applied to the testicles, eyes and cardiac region (10.16); moderate sveda may be applied to the region of the groins (10.17); strong sveda or any degree required may be applied to other places (10.18). The chapter ends with a quotation from the *Carakasamhitā*.

Chapter eleven deals with: virecana as a term covering both vamaṇa and virecana sensu stricto (11.1); drugs belonging to the madanaphalādigaṇa are used as emetics (11.2), those belonging to the trivṛḍādigaṇa as purgatives (11.3); the properties on which their effects are based (11.4); fire and air predominate in emetics, water and earth in purgatives (11.5–6); drugs which are of the nature of all four elements act both ways (11.7); emetics should be given together with honey and salt; tepid water, mixed with liquorice juice, is the appropriate anupāna (11.8); drugs to be prescribed when the usual emetic does not work (11.9); three grades of purification by means of emesis are distinguished, characterized by eight, six and four bouts (vega) of throwing up (11.10); their effects on the patient's strength (11.11); specifications regarding the three grades: the

eight bouts consist of four bouts connected with kapha, two with pitta and two with vāta; the six bouts consist of four connected with kapha and two with pitta; the four bouts are only kapha bouts (11.12); the highest grade (pradhānaśuddhi), as it has been described, is indicated when a large amount of doṣas is involved (11.13); pradhānaśuddhi is reached in cases with a moderate amount of doṣas by means of six bouts; three of these are connected with kapha, two with pitta and one with vāta (11.14); similarly, pradhānaśuddhi is reached in cases with a small amount of doṣas by means of four bouts; two of these are connected with kapha, and one each is connected with pitta and vāta; this series of four bouts should not be confused with the lowest grade of the standard series (11.15); with respect to the three grades, the amount thrown up should be two prastha, one prastha, and half a prastha respectively (11.16); specifications regarding the middle and low grades of purification in cases with a large, moderate and small amount of doṣas (11.17); the effects on the patient's strength of all these distinct types (11.18); the gradations of the procedure have thus been described (11.19); an increase of temperature (tāpa), caused by excitement of pitta, is characteristic of the arrival of a bout of vomiting (11.20); madanaphala is the best emetic (11.21); preparations to be administered prior to the emetic (11.22); the emetic should be given on an empty stomach; the patient may only take some yavāgū or ghee (11.23); the morning is the most suitable time (11.24); an emetic works without being digested; for that reason one should give a second dose when the effect is not quickly produced (11.25); however, this second dose should not be administered until the first one has been digested (11.26); the patient should fast for some time when the dose proved to be too small (11.27); purgation is indicated when the dose was too large (11.28); the drugs suitable to be used for purgation; they should be given about noon (11.29); complete purification will be reached after thirty, twenty or ten bouts, dependent on the three grades (11.30); as a result, the temperature will drop, due to the decrease of pitta (11.31); the amount of doṣas expelled should be four, three or two prastha (11.32); this purgation is of four types: anulomana, sraṃsana, recana or bhedana (11.33); persons who are krūrakoṣṭha are not easily purged and should be given an anuvāsana (11.34); purgatives suitable to delicate persons (11.35).

Chapter twelve, a long one, is called mayūkharāja because it deals with basti, which is the chief one among the six basic procedures (12.1); basti consists of the application of decoctions, oils, etc., by way of the anus, vagina or urethra (12.2); a basti is called thus because the bladder (basti) of an animal is used in this procedure (12.3); basti is of three types, according to the three ways of administration (12.4); it is of two types according to the fluid used: a basti with a decoction (kaṣāya) is a kaṣāyabasti, nirūha or āsthāpana, a basti with a fatty substance is a snehabasti or anuvāsana (12.5); three types are distinguished according to the dose; a mātrābasti contains a prasṛta of a fatty substance, an anuvāsana three prasṛta; a nirūha contains twelve prasṛta of a decoction (12.6); six types are distinguished according to the effect aimed at: utkleśabasti, lekhanabasti, śodhanabasti, śamanabasti, bṛṃṣṇabasti, vṛṣyabasti, rasāyanabasti, and śukrastambhanabasti; they should be administered in the mentioned order; a stambhanabasti is also indicated in cases of afisāra, raktāfisāra, and the downwards moving type of raktapitta (12.7); a śamanabasti is vāta-, pitta- or kaphaśamana (12.8); basti is

of nine types according to the place of the body where a disorder is located: *śiro-*, *pārśva-*, *prṣṭha-*, *udara-*, *uro-*, *kaṭi-*, *guda-*, *yoni-*, and *mūtrabasti* (12.9); apart from the last three, these *bastis* are of the *snehabasti* type (12.10); the last three may be either of the *anuvāsana* or of the *āsthāpana* type (12.11); in children up to the twelfth year the dose of a *nirūha* increases by half a *prastha* each year, beginning with half a *prastha* in the first year (12.12); subsequently, the dose increases with one *prastha* each year up to the eighteenth year of life (12.13); the appropriate dose for persons older than seventy is the same as that for those sixteen years old, i.e., ten *prasṛta* (12.14); the dose of an *anuvāsana* is always one quarter of that of a *nirūha* (12.15); the dose of a *mātrābasti* varies in the same way as that of an *anuvāsana* (12.16); the rule for the ratios of the ingredients of a *nirūha*; this rule does not apply to a *kṣīrabasti* (12.17); the fluids in a *mādhutailikabasti* are a quarter less in amount; its dose consists of nine *prastha* (12.18); the ratio of the fatty substance in a *nirūha* varies according to the *doṣa* mostly involved in the disorder (12.19); the ratio of the honey varies inversely (12.20); the remaining ingredients do not vary (12.21); the salt should be ground, mixed with the honey, and then added to the fatty substance (12.22); after this, one should add the decoction, subsequently the *gūḍa* and the *kalka*, then stir the mixture with a churning stick (*khajā*) (12.23); one should fill the pouch with the tepid or warm mixture, lubricate the tube, and introduce it (12.24); the patient should lie on his left side (12.25), stretch his left leg and pull up his right knee (12.26), while breathing slowly (12.27); sneezing, hiccupping and coughing should be suppressed (12.28); the fluid should not be introduced hurriedly (12.29); a remnant should be left in the pouch in order to prevent that air is compressed inside (12.30); breaking of the fluid will not take place when it has properly been stirred (12.31); *abhyāṅga* and *svedana* of the belly are indicated when air has got inside (12.32); the physician should press the buttocks of the patient after administration of a clyster; the patient should pull up both knees and then stretch his legs five to seven times (12.33); a *nirūha* should remain inside for a *muhūrta* (12.34); an *anuvāsana* should remain twice to four times as long (12.35); after elimination of the fluid, the anal region should be sprinkled with tepid water (12.36); when the remnant has not come out at the proper time, a purgative clyster should be given (12.37); the patient should bathe and take some food; the type of food that is appropriate depends on the main *doṣa* involved (12.38); the ratios of the ingredients in an *anuvāsana* (12.39); an *anuvāsana* should be administered in the evening, after a light midday meal has been digested (12.40); the proper amounts of salt and decoction should be taken (12.41); too much of the decoction will make the fluid come out too soon; too much salt will give rise to a burning sensation and diarrhoea (12.42); disorders brought about when the fluid is too warm, too cold, or too much irritating (*tikṣṇa*) (12.43); disorders arising when the fatty fluid has not properly been boiled (12.44); a cold clyster is indicated in diseases caused by *pitta* (12.45); requirements for the couch (12.46); a *mātrābasti* for *br̥mhaṇa* purposes should be given daily; other types are to be administered according to what is taught about them, dependent on the specific circumstances (12.47); periods of time suitable to the administration of an *anuvāsana* (12.48); the intervals should be twice as long as for a *nirūha* (12.49); things to be avoided by the patient during the course of treatment (12.50); the success of the treatment depends on a proper consideration of the *doṣa*(s)

involved, the qualities and actions of the drugs used, etc. (12.51); one or three *anuvāsanas* are required in disorders caused by *kapha*, five or seven in those caused by *pitta*, nine or eleven in those caused by *vāta* (12.52); the specific effects of the first to ninth *anuvāsana* (12.53); in cases of *śukradoṣa* the number of *anuvāsanas* should be doubled (12.54); causes for failure of the treatment (12.55–57); requirements for the pouch (12.58); substitutes for the leather of the pouch (12.59); nowadays, rubber is used for the pouch and iron for the tube (12.60);³⁰⁹ the tube may also be made from gold and other metals (12.61); requirements for the tube (12.62–63); the dimension of the tube when employed for the administration of a clyster to children of various ages (12.64–65); the tube should possess three bulbous protrusions (*karṇikā*) (12.66); two *karṇikās* serve to fasten the tube to the pouch; one *karṇikā*, in the middle, prevents the introduction of too long a part of the tube (12.67); the dimensions of the opening in the tube (12.68); defects of the opening (12.69); defects of the pouch to be avoided (12.70). The chapter ends with two verses in praise of *basti*.

Chapter thirteen deals with: the three types of *nasya*: *śodhana-*, *br̥mhaṇa-* and *śāmananasya* (13.1); the difference between the types called *pradhamana* and *avapīḍana* (13.2); the differences between a *rūkṣa* and a *snigdha nasya*; the former consists of a powder, the latter of a fatty substance in which drugs have been boiled (13.3); disorders with a large amount of *doṣas*, particularly *kapha*, require *pradhamana* with a *rūkṣa* and *śodhana* powder (13.4); *vāta* disorders require a *snigdha nasya* (13.5); *nasyas* are of three types according to the dose employed: *bindumātra*, *pratimarśa* and *marśa*; their doses are one *bindu* (drop), two *bindu*, and six to a hundred *bindu* respectively (13.6); a *bindumātra* is given once, a *pratimarśa* twice, a *marśa* three times daily (13.7); the period of time for the administration depends on the main *doṣa* involved: the morning in case *kapha*, the afternoon in case *pitta*, the evening in case *vāta* is involved (13.8); the proper season depends on the same type of considerations (13.9); rules for a *śodhana nasya* (13.10); the proper position of the patient (13.11); the ways of administering a powder and a fluid (13.12); a *nasya* may be given during the night when a *doṣa* has extremely increased (13.13); the number of drops should be eight, six or four, dependent on the strength of the patient (13.14); a *nasya* should not be given to children under eight years of age (13.15), neither to persons older than eighty (13.16); *Suśruta*'s rules for the use of *pratimarśa* in the healthy (13.17); the *sneha* for a *nasya* should be prepared by *madhyapāka* (13.18).

Chapter fourteen deals with: the five types of bloodletting;³¹⁰ by means of a horn (*śṛṅga*), leeches, or a gourd (*alābu*), scarification (*pracchāna*) by means of a *lavitra*,³¹¹ and phlebotomy (14.1); these methods are indicated in disorders by *vāta*, *pitta* and *kapha*, in local disorders due to the three *doṣas*, and in general disorders respectively (14.2); the amount of blood to be drawn in *vāta*, *pitta* and *kapha* disorders (14.3); alternatively, all the *doṣas* may be eliminated by each of the methods mentioned (14.4); the maximum amount that may be drawn by each of the methods (14.5); the etymology of *jālukas* (leech) (14.6); the names of the six poisonous and the six non-poisonous leeches (14.7); the way of drawing blood by means of leeches (14.8); the signs indicating that leeches have completed sucking corrupted blood (14.9); sprinkling with salt makes a leech let go (14.10); one should make the leeches vomit

the corrupted blood ingested; otherwise, they would develop the disease called rakta-mada (14.11); the wound should be treated with śatadhautaghrta³¹² (14.12); sprinkling cold water over it will help when the bleeding does not stop (14.13); bloodletting is difficult in cold weather (14.14); warm weather leads to profuse bleeding (14.15); bloodletting should therefore be avoided under these circumstances (14.16).

Chapter fifteen deals with: uttarabastis are generally snehabastis (15.1–2); the nirūha type is also used (15.3); the suitable position for a male patient (15.4); an āsthāpana should precede an uttarabasti (15.5); the bladder should be emptied (15.6); the patient should bathe and take as food either a broth or milk (15.7); the suitable position for a female patient (15.8); the dose is half a prasṛta when the patient is eighteen years (or older), a quarter of a prasṛta when the patient is twelve (15.9); the dose for a vaginal uttarabasti is a prasṛta (15.10); it should not be used in children (15.11); a vaginal uttarabasti should be administered when the menstrual period has ended (15.12); requirements for the tube for a vaginal uttarabasti (15.13); requirements for the tube for an urethral uttarabasti in adults (15.14) and in children (15.15); the lengths of the tube for males, females and children (15.16); the dimensions of the opening (15.17); the tube should possess a karṇikā (15.18); the amounts of decoction and fatty substance to be used (15.19).

Chapter sixteen, the mahāmayūkha, deals with: the explanation of the title mahāmayūkha (16.1); rules for the treatment of vāta diseases (16.2); lepa (16.3); abhyaṅga (16.4); udvartana (16.5); pādāghāta (16.6); sadyaḥsnehana (16.7); śirobasti (16.8); pr-ṣṭha-, pārśva-, uro-, kaṭi-, and udarabasti (16.9); śirodhārā (16.10); takradhārā (16.11); dhānyāmladhārā (16.12); karṇapūraṇa (16.13); āścyotana (16.14); gaṇḍūṣa (16.15); a-ñjana (16.16); nasya (16.17); saṃkarasveda (16.18); snigdhataralapiṇḍasveda (16.19); ṣaṣṭisālīpiṇḍasveda (16.20); godhūmapiṇḍasveda (16.21); śālvaṇapiṇḍasveda (16.22); patrapīṇḍasveda (16.23); prastarasveda (16.24); upanāhasveda (16.25); patropanāhasveda (16.26); śālvaṇopanāhasveda (16.27); avagāhasveda (16.28); pariṣekasveda (16.29); snehadhārāsveda (16.30); holākoṣmasveda (16.31); kūpoṣmasveda (16.32); kuṭīsveda (16.33); karṣusveda (16.34); jentākasveda (16.35); nāḍīsveda (16.36); kumbhikasveda (16.37); aśmaghanasveda (16.38); bhūisveda (16.39); anagnisveda (16.40); vamaṇa (16.41); virecana (16.42); bastikrama (16.43); utkleśanabasti (16.44); lekhanabasti (16.45); śodhanabasti (16.46); sāmanabasti (16.47); br̥ṃṇanabasti (16.48); vṛṣyabasti (16.49); śukralarasāyanabasti (16.50); śukrastambhanabasti (16.51); vājīkaraṇabasti (16.52); picchābasti (16.53); balyapicchābasti (16.54); grāhibasti (16.55); vandhyātvaghnanabasti (16.56); madhutailabasti (16.57); yuktarathabasti (16.58); siddhabasti (16.59); guḍūcisiddhabasti (16.60); yāpanabasti (16.61); kṣīra-basti (16.62); śītabasti (16.63); vātaghnabasti (16.64); kuṣṭhaghnabasti (16.65); kṛmighnabasti (16.66); mūtrakṛcchraghnabasti (16.67); anuvāsanabasti (16.68); mātrābasti (16.69); anuvāsanārhaṣṭayāditaṭailas (16.70); āsthāpanatāṭailas (16.71); sarva-roghararāśnāditaṭailas (16.72); vātādighnabasti (16.73); yathākālābalabasti (16.74); uttarānuvāsanāsthāpana (16.75); snehabhāga in nirūhaṇa (16.76); taiḥṣṇyakṛddravayas (16.77); mārḍavakaradravyas (16.78); pradhamananasya (16.79); br̥ṃṇananasya (16.80); svarasanasya (16.81); avapīḍanasya (16.82); saṃjñāprabodhananasya (16.83); maricādinasya (16.84); br̥ṃṇananasya (16.85); vairecanikadhūmrānasya (16.86);

na copagiled asamarthaḥ (a nasya should not be swallowed) (16.87); raktamokṣaṇa (16.88); uttarabasti (16.89); picudhāraṇa (16.90); the preparation of odana (16.91), vilepī (16.92),³¹³ yavāgū (16.93),³¹⁴ sūpa (16.94),³¹⁵ śāka (16.95), yūṣa (16.96), kāmālika (16.97), khaḍa (16.98),³¹⁶ saktu (16.99), peyā (16.100), and māmsarasa (16.101); kṛtākṛtayūṣa (16.102); gandharvahastādigaṇa (16.103); kākolyādigaṇa (16.104); vidārigandhādigaṇa (16.105); āragvadhādigaṇa (16.106). Two concluding sūtras end this chapter and the whole treatise.

The treatise is said to consist of 527 sūtras.

The author, of Citraguptagotra, was a pupil of Raghunāthaśarman, Muralīdharamiśra and Lālacandravaidya; he resided at Mahiṣīgrāma.³¹⁷

SIDDHABHAIŚAJYAMAÑJŪṢĀ³¹⁸ by Jayadeva Śāstrin³¹⁹ is a treatise that carries on the tradition of medical kāvyas, such as the works of Lolimbarāja. It shows the influence of Kṛṣṇarāma's *Siddhabhṛṣajamañimālā*, quoted in the commentary. The work is written in verses of various metres,³²⁰ composed by the author himself.

The first volume (prakoṣṭha), the only one published, contains 634 verses, divided into four chapters (koṣṭhaka). Chapters two to four are subdivided into adhikāras.

Chapter one is of an introductory nature. Chapters two to four are devoted to the treatment of diseases, beginning with jvara and ending with apasmāra. The order adopted is that of the *Mādhavanidāna*. The modes of treatment described derive from āyurvedic treatises, works on rasaśāstra, Islamic medicine, and western medical textbooks.³²¹ Religious elements are also present in Jayadeva's therapy.³²² Sources are rarely quoted or referred to.³²³

The *Siddhabhṛṣajamañjūṣā* is quoted in Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa* and Yādavjī Trikamjī's *Rasāmṛta*.

Some diseases described are known from late āyurvedic treatises, e.g., muktājvara (jvara 46, 48, 50, 53),³²⁴ or have been borrowed from western medicine, such as āntrikajvara (jvara 46, 48),³²⁵ daṇḍakajvara (jvara 72),³²⁶ mastiṣkamūlāmaya (jvara 93),³²⁷ sandhikajvara (jvara 72), śleṣmakajvara (jvara 56, 72),³²⁸ and śvasanaka (jvara 55, 57, 72).³²⁹ Another type of fever mentioned is masūrījvara (jvara 90). Terms borrowed from western medicine are jīvāṇu (micro-organism; jvara 55) and sūcikriyā (injection; agnimāndya 51).

The materia medica presents a large number of unusual substances, found only in late medical treatises, or derived from Islamic, occasionally from western medicine.

Examples are: aileya (jvara 71),³³⁰ akaravī (jvara 82), ālūvakhārāphala (tr̥ṣṇā 1),³³¹ aruṇamarica (agnimāndya 43),³³² bhīmasenākhyakarpūra (agnimāndya 19),³³³ cāsakū (arśas 22),³³⁴ chikkā (atisāra 47),³³⁵ darūnaja (jvara 82),³³⁶ gandhinī (hikkā 6),³³⁷ gundrikā (raktapitta 5),³³⁸ hāraśrīgāra (jvara 131; arśas 6),³³⁹ haupī (arśas 20),³⁴⁰ iṣikāsnuhī (kāsa 5),³⁴¹ iṣpagola (kāsa 18),³⁴² iṣvarabola (atisāra 12 and 46),³⁴³ jadavāraka (jvara 81),³⁴⁴ jaharamoharā (jvara 82),³⁴⁵ jaharāśman (tr̥ṣṇā 1),³⁴⁶ jaitūnatāṭaila (jvara 68),³⁴⁷ jānakīphala (apasmāra 14),³⁴⁸ jūphā (jvara 125),³⁴⁹ jūphikā (kāsa 20), kaharavā (arśas 39),³⁵⁰ kalā (jvara 5 and 125),³⁵¹ kalaśora (pāṇḍuroga 11), kalasora (raktapitta 7),³⁵² kāsinī (jvara 125),³⁵³ kattīra (atisāra 46),³⁵⁴ khatamī (jvara 126; kāsa 17),³⁵⁵ khubbājī (kāsa 17),³⁵⁶ khūnakharābā (arśas 39),³⁵⁷ kubera

(krimi 5),³⁵⁸ kulaphā (rājayakṣman 29),³⁵⁹ kunaina (jvara 36),³⁶⁰ makhatūma (jvara 81), muremakki (jvara 81),³⁶¹ papitā (jvara 81),³⁶² podī (agnimāndya 41),³⁶³ podīna (chardi 1),³⁶⁴ revatasitā (śvāsa 27),³⁶⁵ rūmagundra (jvara 71),³⁶⁶ sahasrasuma (arśas 4),³⁶⁷ śāhatārā (jvara 126),³⁶⁸ sanāmukī (arśas 8),³⁶⁹ saudhāvāri (agnimāndya 40–46),³⁷⁰ soḍāvāri (agnimāndya 2),³⁷¹ svādukhistā (raktapitta 13),³⁷² tamākhū (krimi 6),³⁷³ tārpīnataila (jvara 68),³⁷⁴ tīkṣṇapattrā (trṣṇā 13),³⁷⁵ unnābha (jvara 124; rājayakṣman 23),³⁷⁶ vādāvarda (rājayakṣman 30),³⁷⁷ vanapsā (jvara 16),³⁷⁸ and viṣṇupadāmṛta (rājayakṣman 2).³⁷⁹

Some medicinal preparations are borrowed from Islamic or western medicine, for example, cāya (tea; jvara 35) and śārkara (atisāra 38; agnimāndya 29). Compound formulae derived from Islamic medicine are itrīphala (mūrchā 14), sikañjī (agnimāndya 3), and sulemānilavaṇa (agnimāndya 10–11).

The last verses of the first prakoṣṭha mention the author's name, Jayadevaśarman,³⁸⁰ and his residence, Rāmadurganagara, in Marupradeśa,³⁸¹ Rājasthān. The commentator adds numerous details on the author's genealogy: he was the younger of the two sons of Sāmpalārāmaśarman;³⁸² his grandfather's name was Raghunātharāyaśarman. Jayadevaśarman was adopted by Caturbhujāśarman, a paternal uncle of his father, who instructed him in āyurveda and other sciences.³⁸³ The author himself mentions two of his teachers, Śrīdatta and Nīlakaṇṭha; āyurveda was taught to him by Sāgara, i.e., Sāgaramallaśarman, and Śrīmaṇi, i.e., Mañirāmaśarman.³⁸⁴

The *Siddhabhaiṣajyamañjūṣā* was completed in 1929/30.³⁸⁵

The Sanskrit commentary on the *Siddhabhaiṣajyamañjūṣā*, called *Kuñcīkā*, was written by Hanumatprasāda.³⁸⁶ The *Kuñcīkā* gives synonyms of the names of medicinal substances, and in many cases the vernacular names as well; it explains how to prepare the compound drugs, etc. The metres of Jayadeva's verses and the alaṃkāras employed are also pointed out.

Works and authorities quoted or referred to are: *Atharvaveda* (rājayakṣman 2 and 3), Bhoja (rājayakṣman 1), Caraka (rājayakṣman 2), *Nighaṇṭuratnākara* (grahaṇī 11), *Rasendrasārasaṃgraha* (jvara 114; grahaṇī 13), *Rgveda* (rājayakṣman 2), Śāringadhara (jvara 13), *Siddhabhaiṣajyamañjūṣā* (jvara 16–18 and 19; agnimāndya 39), *Siddhāntanidāna* (jvara 152), Suśruta (arśas 1), *Vaidyajīvana* (agnimāndya 27), and *Yogatarāṅgiṇī* (jvara 115).

Occasionally, the names of vaidyas are mentioned who transmitted a particular formula: Kṣamāpativājapeyin,³⁸⁷ (kāsa 26–27), Rāmaratnaśarman (śvāsa 26 and 27–28), and Śyāmālāla (jvara 97–98).

*SIDDHĀNTANIDĀNA*³⁸⁸ was written by Gaṇanāthasena. This is a modern work in Sanskrit on the general principles of pathology, and on the aetiology and symptomatology of diseases. It is based on āyurvedic concepts, but has been influenced by western medicine in its nosology. The arrangement of the diseases has been inspired by the *Mādhavanidāna*. Only the first volume, on the basic concepts of pathology and on fevers, has been published. This first part of the work consists of 306 verses, arranged in four chapters.

Chapter one, doṣadūṣyādinirṇaya, begins with a maṅgala in praise of Viṣṇu and a stanza addressed to the author's father, Viśvanātha, who was his teacher in āyurveda. The remaining verses of chapter one (3–50) are on the doṣas and dūṣyas, their normal and their imbalanced state, the doṣas when accompanied by or devoid of āma, the signs of increase and decrease of the doṣas and dūṣyas, and the stages of the pathogenetic process. Chapter two (vyādhivijñāna; 15 verses) deals with the concepts of nidāna, pūrvārūpa, rūpa, upaśaya, and samprāpti, while chapter three (vyādhiparīkṣā; 11 verses) is concerned with the examination of a patient. Chapter four (230 verses) contains descriptions of a long series of fevers, partly taken from western medicine.

Sources are not referred to, but a number of verses have been taken from the *Mādhavanidāna* (or its sources)³⁸⁹ and the *Suśrutasaṃhitā*.³⁹⁰ The majority of the stanzas, however, have been composed by the author.

The *Siddhāntanidāna* is quoted in Priyavrat Śarmā's auto-commentary on the *Āyurvedadarśana* and in the same author's *Doṣakāraṇatvamimāṃsā*, Rājesvaradatta Miśra's *Svasthavṛttasamuccaya*, and the commentary on the *Siddhabhaiṣajyamañjūṣā*.

The rather elaborate commentary, called *Tattvadarśinī*, written by the author himself, does not mention the sources of the *Siddhāntanidāna*, but quotes from a number of works and authors: Bhāyamīśra (4.98 and 125), Caraka (passim), (*Bhagavadgītā* (1.4), Kharanāda (4.177), Mādhava (4.127), *Nāgabhartṛtantra* (4.198), *Pratyakṣa(śāstra)* (1.13), *Sāṃkhyakārikā* (1.4), Śāringadhara (1.12; 4.225–226), Sudāntasena (1.19, 20, 21), Suśruta (passim), Vāgbhaṭa (passim), (Vijaya)rakṣita (4.198), and Vṛddhasuśruta (4.31).

Some types of fever, well known from āyurvedic texts, are equated with syndromes of western medicine: abhinyāśajvara (4.20–22): severe toxæmia or septicaemia; sam-tatajvara (4.186–188): malarial remittent fever; satataka (4.189): double quotidian fever; anyedyuṣka (4.195): quotidian fever; trītyaka (4.195): tertian fever; caturthaka (4.195): quartan fever; pralepaka (4.206–207): hectic fever; brhanmasūrikā (4.129–147): smallpox; laghumasūrikā (4.148–159): chicken pox; romāntikā (4.160–170): measles; kaṇṇamūlakajvara (4.175–177): mumps; ślaipadikajvara (4.208): filarial fever.

New types of fever, borrowed from western medicine, are: āntrikajvara (4.45–61): enteric or typhoid fever; granthikajvara (4.62–74): plague or bubonic fever; śleṣmakajvara (4.75–85): influenza; saṃdhikajvara (4.86–97): rheumatic fever; śvasanakajvara (4.98–115): pneumonia; ākṣepakajvara (4.116–124): cerebrospinal fever; daṇḍakajvara (4.171–174): dengue; kālajvara (4.190–194): kala-azar or leishmaniasis. The series of fevers ends with aupadravikajvara (4.209) as a complication of protracted diseases, especially grahaṇī, and with fevers occurring in foreign countries (4.210: śoṇa- and hāridrakajvara).³⁹¹

A large number of Sanskrit equivalents for terms borrowed from western medicine are employed, for example, jīvāṇu (micro-organism; 4.47, 65, 76, 88, 101, 107), saṃkrānti (the transmission of contagious diseases; 4.77), śvāsayantra (the respiratory tract; 4.78), kalāpuṭa (pericardium; 4.90), phusphusacchada (pleura; 4.91), suṣumnakāṇḍa (spinal cord; 4.118), etc.

Gaṇanāthasena was born in Benares in 1877. His father, Viśvanāthasena, who gave

him his first lessons in āyurveda, moved to Calcutta in 1883, after the death of his wife. Gaṇanāthasena was trained in āyurveda and modern medicine at the Medical College of Calcutta. He founded the Viśvanāth Āyurveda College at Calcutta in 1931 and established the Kalpataru Āyurvedic Works, a manufacturing firm, also at Calcutta. The honorary title of Mahāmahopadhyāya was conferred on him in 1916 and he was elected president of the All India Āyurveda Mahāsammelan thrice (in 1911, 1920, and 1931). He was the Dean of the Faculty of Medicine and Surgery of Banaras Hindu University from 1927 to 1938. He died in 1945.

Apart from the *Siddhāntanidāna*, he wrote the *Pratyakṣaśārīra* and *Samjñāpāñcakavimarsa*.³⁹²

SIDDHAPRAYOGA by Viśveśvaradayālu³⁹³ is a therapeutic treatise in nineteen chapters, which are arranged in an unusual order: (1) jvara, (2) atisāra and grahaṇī, (3) ajīrṇa, (4) plīharoga, vṛścikadamśa, and jalodara, (5) rājayakṣman, (6) kāsa, śvāsa, hikkā, karnāsrāva, (7) arśas and bhagna, (8) vātaroga, śūla, kuṣṭha, śītapitta, (9) upadamśa, (10) dadru, pāmā, kaṇḍū, (11) mūtrakṛcchra, (12) virecana, (13) vraṇa, (14) dhāturoga, prameha, svapnadoṣa,³⁹⁴ (15) strīroga, (16) śrīroga,³⁹⁵ (17) mukharoga, (18) netraroga, (19) bālāroga; a pariśiṣṭa on a diversity of subjects is found at the end. The work contains both āyurvedic prescriptions and rasayogas.

Borrowings from western medicine occur rather frequently in this book. Examples are: tāpamāna (body temperature), phusphusabhittiśoṭha (pneumonia), and plegākhyaroga (plague).

The materia medica is of a mixed type and contains some drugs deriving from Islamic and western medicine: aisiḍaborika (boric acid: 36), beriyam salphāṭaka (barium sulphite: 84), brāṇḍi (brandy: 48), isabgola (71),³⁹⁶ khabbājī (45),³⁹⁷ kiṭāṣṭhivana (19),³⁹⁸ kunenasalphet (quinine sulphate: 15), pistā (78),³⁹⁹ pīparamēṭaka (peppermint: 24), śītacīnī (70),⁴⁰⁰ and veslina (vaseline: 51).

SIDDHAPRAYOGALATIKĀ⁴⁰¹ by Guṛājśarmamiśra is a mainly therapeutic treatise, consisting of about 1,800 verses, arranged in a maṅgalācaraṇa, upodghāta, and thirty-four chapters (puṣpa).

The maṅgala is in praise of Pārvatī; the author also pays homage to his teachers in āyurveda and other sciences: Govardhana Chāṅgāṇī (3 and 19),⁴⁰² Kedāra(nātha) (4), and Kālicāraṇa (5).⁴⁰³ The upodghāta deals with some general subjects, pharmaceutical preparations, groups of drugs, weights and measures, and substitutes for particular drugs.

The order of the diseases dealt with in chapters one to thirty-four deviates considerably from the traditional arrangements and seems to be peculiar to this treatise.

Noteworthy disorders mentioned by the author are: amśughāta (28.1–19),⁴⁰⁴ antrapucchabhavaśoṭha (33.11),⁴⁰⁵ ātapadagha (1.147),⁴⁰⁶ asthiśoṣa (17.62), dhanuṣṭaṅka (12.7),⁴⁰⁷ dr̥ṣṭidoṣa (26.24 and 93),⁴⁰⁸ hṛdvepana (17.64),⁴⁰⁹ kakṣāgranthi (29.25),⁴¹⁰ kālasphoṭa (32.27–29),⁴¹¹ mastiṣkaroga (28.10),⁴¹² māstiṣkaroga (26.79), masūrikājvara (1.140–141),⁴¹³ mauktikājvara (1.150),⁴¹⁴ mocāghāta (12.18),⁴¹⁵ phiraṅga (12.44; 17.62; 26.103), pratiśyāyajvara (1.168), raktacāpa (12.7; 21.50; 33.27

and 85),⁴¹⁶ retahkṣaraṇa (18.23),⁴¹⁷ sauṇjaka (13.2 and 22),⁴¹⁸ siriṇī (29.51–53),⁴¹⁹ sphoṭaphunsi (16.9),⁴²⁰ sujātaka (13.24),⁴²¹ śvasanakajvara (1.33),⁴²² urastoya (27.5), vipakṣaka (12.20),⁴²³ viśasphoṭa (32.29), yakṛcchūla (33.14), yamayūkāḥ (29.31),⁴²⁴ yoṣāpasmāraka (17.63), and yoṣāpasmarāṇa (33.83).

The author repeatedly stresses that the efficacy of his formulae has been tested by himself⁴²⁵ or other medical experts.⁴²⁶

The maṅgala verses mention some physicians who transmitted formulae to the author:⁴²⁷ Govardhana (Chāṅgāṇī), Yādava (Trikaṁjī), Lakṣmī(rāma),⁴²⁸ Kṛṣṇa(rāma),⁴²⁹ Jaya(deva),⁴³⁰ and Śiva(śarman).⁴³¹

Authorities from whom particular recipes derive and other sources referred to by name are: Agastya (23.23), Basavarājīya (5.12),⁴³² Boraḍakara (1.98), Dhanvantari (1.18; 26.63), Gahananātha (22.55; 34.23), the author's guru (1.13, 38, 62, 106; 7.8; 12.27; 16.34; 22.14), Hakīma Ahamada Baksa (3.50), Hari (28.13), Jayadeva (4.48ab),⁴³³ Kāśyapa (33.61 and 80), Kāśyapa (33.59), Kṛṣṇarāma (4.68),⁴³⁴ Lakṣmīrāma (21.51), Prabhaviṣṇu (16.7), Rāmākṛṣṇa (3.40), Rāmanārāyaṇa (2.7), the student (vidyārthin) Śambhudatta, a Sārasvata brāhmaṇa (17.28), Saṁtoṣaśarman (30.17; the formulae of chapter thirty-three), Sītārāma (2.67), Śiva(śarman) (1.92; 8.18), Suśruta (26.19; 32.12), Tryambakaśāstrin (2.39),⁴³⁵ Vedaprakāśa (20.21), Viśvanātha Dvivedin (33.75), Yādava(śarman) (Trikaṁjī) (1.48 and 88; 4.64; 6.21; 22.32), Yāvanamata (7.16),⁴³⁶ and Yogaratnākara (34.42).

More recipes than indicated were borrowed from earlier works⁴³⁷ or consist of adaptations and are rewritten by the author.⁴³⁸

Some elements of western medicine were incorporated: the circulation of the blood is referred to⁴³⁹ and the presence of iron in the erythrocytes is known to the author.⁴⁴⁰

The materia medica is characterized by numerous substances unknown to early texts; a not inconsiderable number of these drugs derive from Yūnānī and western medicine.

Examples of noteworthy substances are: ābareśama (21.14; 34.41),⁴⁴¹ abdhiskanda (8.16),⁴⁴² akīka (7.20; 8.14; 21.4),⁴⁴³ añjavāra (22.30),⁴⁴⁴ ārogyavardhinī (22.30),⁴⁴⁵ bahumana (21.41),⁴⁴⁶ bhilī (2.2; 12.10),⁴⁴⁷ borika (15.8),⁴⁴⁸ brāṇḍī (13.13),⁴⁴⁹ chaḍīlāchāi (upodghāta 58),⁴⁵⁰ cokiyaṭāṅkaṇa (5.7),⁴⁵¹ dālacikanā (17.12), dālacikkana (13.12),⁴⁵² dālacikkana (13.6), dālacīnī (6.18),⁴⁵³ dambū (33.32), dambūla (14.20), dambūla (3.17 and 45; 7.9),⁴⁵⁴ dāriyāyika (21.46),⁴⁵⁵ dhākagundra (18.9),⁴⁵⁶ eluvā ((22.37),⁴⁵⁷ gājavā (8.19),⁴⁵⁸ gandhavirojā (15.43),⁴⁵⁹ guḍaghoṣā (3.54),⁴⁶⁰ guḍamāra (18.6),⁴⁶¹ gulagūlā (24.12),⁴⁶² habbulasa (2.18),⁴⁶³ haramala (22.42),⁴⁶⁴ haraśṛṅgāra (1.80),⁴⁶⁵ himasāgara (12.21),⁴⁶⁶ hīrādokhī (14.20),⁴⁶⁷ jadavāra (8.16),⁴⁶⁸ jahara (7.20),⁴⁶⁹ jaharamoharā (2.41; 8.14; 21.9),⁴⁷⁰ jalaṇīma (19.32),⁴⁷¹ jatūnataila (1.138 and 139),⁴⁷² jhāvū (26.23),⁴⁷³ junda (8.25; 21.42),⁴⁷⁴ jundaka (17.46), jundavedastara (17.2),⁴⁷⁵ kābulī abhaya (2.24),⁴⁷⁶ kaharavā (3.27),⁴⁷⁷ kalamīśoraka (1.129),⁴⁷⁸ kālāri (1.37 and 48),⁴⁷⁹ kalisudhā (19.49; 24.14),⁴⁸⁰ kandhāridāḍīmī (7.34),⁴⁸¹ kāravālika acid (15.14),⁴⁸² kārbolika (15.44),⁴⁸³ karila (20.16),⁴⁸⁴ kārūragundra (33.32),⁴⁸⁵ kattha (13.15),⁴⁸⁶ khairasāra (3.2),⁴⁸⁷ khūbakalā (1.21 and 51),⁴⁸⁸ khūnakharāvā (3.27),⁴⁸⁹ kiṅkara (15.32),⁴⁹⁰ kiṅkaraka (19.44), kṛṣṇagundra (18.18),⁴⁹¹ kulhī (30.17),⁴⁹² lāhī (2.43),⁴⁹³ latakarāṇja (1.12),⁴⁹⁴ mahārāsnā (12.19),⁴⁹⁵ māī, hrasvā

(2.18),⁴⁹⁶ mārūvṛntāka (17.35),⁴⁹⁷ mocanī (26.69),⁴⁹⁸ morā (1.89),⁴⁹⁹ narakarcūṛaka (19.26),⁵⁰⁰ nāyakā (18.6),⁵⁰¹ nīlagirītaila (15.13),⁵⁰² nīlama (21.9),⁵⁰³ nirañjana (33.32 and 35),⁵⁰⁴ pannā (21.9, 13, 34),⁵⁰⁵ pāṭhānīlodhra (14.1; 33.17),⁵⁰⁶ pittaparipata (1.49),⁵⁰⁷ postaḍoḍā (17.50),⁵⁰⁸ prastarapuṣpaka (21.42),⁵⁰⁹ rāji, kāsikā (11.4),⁵¹⁰ rāji, kāsībhūmisamudbhūtā (24.5), sabja (28.14),⁵¹¹ sahasrasuma (3.52),⁵¹² sālamapañjikā (17.8),⁵¹³ saṅgeyaśa(ba) (7.20; 8.14; 21.10),⁵¹⁴ saptaraṅgī (18.19; 30.41),⁵¹⁵ saṭhavā (33.10),⁵¹⁶ śora (15.8),⁵¹⁷ śoraka (4.41; 30.10 and 18), sphatīphullā (1.43),⁵¹⁸ sprīṭka (13.13),⁵¹⁹ suma (17.46),⁵²⁰ surañjana (12.8, 49, 55),⁵²¹ śyāhajiraka (4.2 and 15),⁵²² tamākhū (15.13),⁵²³ tārpīnataila (1.138 and 139),⁵²⁴ taruṇyarka (15.8 and 33; 21.11 and 16; 26.38),⁵²⁵ tṛṇakānta (3.17; 7.20; 14.2 and 20; 21.5, 14, 35, 40),⁵²⁶ tukhmakhatami (8.19),⁵²⁷ tukhmarāi (7.28),⁵²⁸ unnāva (12.3; 19.32),⁵²⁹ usabā (12.3), usavā (19.45), usavvā (19.32),⁵³⁰ utphulla (29.26),⁵³¹ utphullā (15.12), vacā, hauṇī (3.30),⁵³² vahamana (21.36),⁵³³ vāvacī (19.38),⁵³⁴ vidhukānta (3.17),⁵³⁵ vihi (8.19),⁵³⁶ viṣamohara (28.8),⁵³⁷ viṣamoharā (11.11), viṣamorā (1.19; 21.46), and viṣamoraka (21.14).

The *Siddhaprayogalatikā* is quoted in the *Viśikhānupraveśavijñāna*.⁵³⁸

The author, a brāhmaṇa, the eldest son of Kedāra(malla) and Mahādevī, was born at Gaurera, a village in the Jaypur district of Rājasthān. He studied āyurveda with Govardhan Śarmā Chāṅgānī; his Sanskrit teacher was Paṇḍit Kālīcaraṇa, his spiritual guru Jāgeśvar Jagannāth. He has been working as a practising physician for over fifty-five years. He established the Ayurvedic College and hospital at Pakvasa, Nagpur.

Apart from the *Siddhaprayogalatikā* he wrote the *Viśikhānupraveśavijñāna* and a Sanskrit and Hindi commentary on the *Āyurvedaprakāśa*.⁵³⁹

The *Siddhaprayogalatikā* was completed in 1987/88.⁵⁴⁰

SIDDHAYOGASAMGRAHA⁵⁴¹ by Vaidya Yādavajī Trikamajī Ācārya⁵⁴² is a collection of compound formulae in Sanskrit, accompanied by explanations in Hindi on their way of preparation, dosage, anupāna, and indications. Some parts of the work are entirely in Hindi. The treatise consists of twenty-nine chapters (adhikāra) and an appendix (pariśiṣṭa). The chapters are arranged according to the diseases against which the recipes are to be used, but this order differs from that of the *Mādhavanidāna* in many respects. The recipes⁵⁴³ are partly taken from a number of āyurvedic and iatro-chemical treatises. Another, not inconsiderable part, derives from the author himself. Occasionally a recipe is said to have been transmitted by a physician mentioned by name.⁵⁴⁴

Sources referred to are: *Aṣṭāṅgasamgraha*, *Āyurvedaprakāśa*, *Bhaiṣajyaratnāvalī*, *Cakradatta*, *Caraka*, *Rasaratnasamuccaya*, *Rasendrasārasamgraha*, *Śārṅgadharasamhitā*, *Siddhabhaiṣajyamāṇimālā*, *Suśruta*, *Triśatī*, *Vaidyājīvana*, *Yogacintāmaṇi*, and *Yogaratanākara*.⁵⁴⁵ A number of recipes quoted from these sources have been changed by the author.⁵⁴⁶

Yādava(śarman) is referred to in Guṇrājśarmamīśra's *Siddhaprayogalatikā*, a work that contains formulae attributed to him.⁵⁴⁷

ŚOḌAŚĀNGAHRDAYA⁵⁴⁸ is a complete textbook of āyurveda, composed by Priyavrata Śarmā.

This treatise consists of 1,551 verses in āryā metre,⁵⁴⁹ arranged, in accordance with its title, in sixteen chapters.

Chapter one is about basic principles (maulikasiddhāntāḥ) and chapter two about anatomy (śārīra). Chapter three, on pharmacology (dravyaguṇa), deals with the basic concepts of pharmacology (1–8) and with the properties of the main medicinal substances (90–140). The subject of chapter four is the preparation of medicines (bheṣajakalpanā); this chapter describes the various medicinal preparations (1–42), weights and measures (43–47), technical rules (paribhāṣā; 48–71), and a number of compound medicines in the following order: kvātha, phāṇṭa, hima, cūrṇa, vaṭikā, avaleha, pāka, modaka, gṛīta and taila, āśava and aṣṭa. Chapter five gives a summary description of rasaśāstra. Chapter six is on the rules for a healthy life (svasthavṛtta). Chapters seven and eight are concerned with rasāyana and vājīkaraṇa. The general principles of pathology (1–30) and the diagnosis of a number of diseases (31–198) form the subjects of chapter nine (rogavijñāna). The remaining chapters are devoted to kāyacikitsā (10), mānasaroga (mental disorders) (11), prasūtitantra (obstetrics and gynaecology) (12), kaumārabhrīya (paediatrics) (13), agadatantra (14), śalyatantra (15), and śālākya (16).

The chapter on anatomy (2) has incorporated many concepts derived from western medicine: arteries (dhamanī), veins (sirā), and capillaries (keśikā) are distinguished; the functions of heart and lungs and the circulation of the blood are described; the ureters are called gavīnī; the dissection of corpses (śavaccheda) is recommended for anatomical studies. Chapter three describes some drugs added to the classical āyurvedic materia medica in later times: babbūla (3.57), pārasīkayavānī (3.99), jayapāla (3.108). Chapter four describes the preparation of an arka (4.36); in the verses on weights and measures it mentions a gram (grāma) and a kilogram (kilo); among the prescriptions we find an ākarakarabhādicūrṇa (4.112–113) and a kṛṣṇabījādicūrṇa (4.138–139); senna (svarnadalā) is an ingredient of one of the compound medicines (4.142); madaphala (= mājūphala) is mentioned (4.146), as well as kulāñjana (4.261). The purification of opium (ahipheṇa) and Cannabis (bhaṅgā) are met with in chapter five. The description of the diseases in chapter nine is not in conformity with the order established by Mādhava; masūrīkā is absent, as well as diseases added after the times of Mādhava. Mānasaroga replaces bhūtavidyā.

The *Śoḍaśāṅgahrdaya* is quoted in the auto-commentaries on the author's *Āyurvedadarśana* and *Dravyaguṇasūtra*.

The author was born in Mustafāpur near Paṭnā and is a son of Rāmāvatāra and Premadūlārī.⁵⁵⁰ Medical works in Sanskrit by the same author are the *Āyurvedadarśana*, *Doṣakāraṇatvamīmāṃsā*, *Dravyaguṇasūtra*, and *Priyanighaṇṭu*.

The *Śoḍaśāṅgahrdaya* was completed in 1986/87.⁵⁵¹

STRĪCIKITSĀ, compiled by Vasatirāma.⁵⁵²

SŪJAKACIKITSĀSAMGRAHA, compiled by Gaṇeśadatta.⁵⁵³

SVAPNAKAMALĀKARA by Rām Kumār Rāy.⁵⁵⁴ This work is a compilation on dreams and their meaning. It consists of five chapters (kallola); chapters one to four (44, 140, 116, and 36 verses respectively) are from unspecified sources; chapter five has been

drawn from the *Dharmasindhu*.⁵⁵⁵

SVASTHAVR̥TASAMUCCAYA by Rājeśvaradatta Miśra Śāstrin.⁵⁵⁶ This work deals, as indicated by its title, with the rules for the preservation of health. The text, in verse and prose, was partly written by the author, partly compiled from various sources. The passages deriving from the author betray the influence of western medicine; micro-organisms (jīvāṇu, kīṭāṇu) are repeatedly mentioned; diseases like kala-azar (kāḷajvara; 342), plague (vātālikā; 342–344), typhoid (āntrikajvara; 344–345), and influenza (śleṣmikasamnipāta; 345) are elaborately described.

Sources referred to by name are: *Aṣṭāṅgasamgraha*, *Ātreyaśaṃhitā*, *Bhagavadgītā*, *Bhāvaprakāśa*, Caraka, *Dakṣasmṛti*,⁵⁵⁷ Devala, *Jābālasamṛti*,⁵⁵⁸ *Kṣemakutūhala*, *Mādhavanidāna*, *Manusmṛti*, *Mayamata*, *Nighaṇṭu*, *Rājamārtāṇḍa*, *Śāringadhara*, *Siddhāntanidāna*, *Smṛticandrikā*,⁵⁵⁹ *Suśruta*, *Vāgbhaṭa*, *Vātsyāyana*, *Vṛddhavāgbhaṭa*, *Vṛndamādhava*, *Yājñiavalkya*, and *Yogaratanākara*.

The author, the eldest son of Rāmanātha Miśra, was born in a village called Āta in the Goṇḍā district in 1901. He studied in Benares, where he settled and practised medicine. He died in 1969.⁵⁶⁰

SVĀSTHYĀMṚTATARANĠINĪ by Lakṣmīnārāyaṇa Miśra.⁵⁶¹ This work consists of quotations from Sanskrit works, accompanied by a Hindī translation.

TRIDOṢASAMGRAHA by Dharmadattavaidya.⁵⁶²

Chapter one (pañcamahābhūtaṣayakavākyasamgraha) deals with the five mahābhūtas, chapter two (vāyuvīṣayakavākyasamgraha) with vāyu, chapter three (pittavīṣayakavākyasamgraha) with pitta, chapter four (kaphavīṣayakavākyasamgraha) with kapha.

The treatise consists of quotations, as well as a few parts which are obviously written by the author.

Works and authorities quoted are: *Aṣṭāṅgasamgraha*, *Bhagavadgītā* (65), *Carakaśaṃhitā*, *Chāndogyaopaniṣad* (5), *Gītā* (7), *Kāśyapaśaṃhitā*, *Śāringadhara* (27), *Suśrutasaṃhitā*, *Vāgbhaṭa*, and *Yogaratanākara* (59).

TRIDOṢATATTVA by Duraisvāmin Aiyāṅār.⁵⁶³

TRIDOṢAVIJÑĀNA by Upendranāthadāsa.⁵⁶⁴

This work consists of ten chapters (adhyāya), mainly in prose, interspersed with verses; the last verses of each chapter summarize the conclusion of the author.

Caraka and *Suśruta* are repeatedly quoted.

Chapter one (tridoṣavicāraprayojana; 3–8) puts forward a number of questions: the scientific status of āyurveda, conflicting opinions on a number of subjects, the nature of a doṣa (doṣasvarūpa), etc.; a series of interpretations regarding the nature of a doṣa are listed: a doṣa has the nature of a dravya, it is a śakti, it is sthūla, it is sūkṣma, it is both sthūla and sūkṣma; the author will deal with these questions in the subsequent chapters. Chapter two (doṣadhātumalatvanirūpaṇa; 9–24) deals with generali-

ties on the doṣas, the position of blood and the other dhātus, etc. Chapter three (doṣasamjñāhetuvārṇana; 25–28) is about the terms doṣa, dhātu and mala. Chapter four (tritasamarthana; 29–38) is concerned with the position of blood; the thesis that it should be regarded as a doṣa is rejected. Chapter five (dravyatvanirūpaṇa; 39–43) establishes that a doṣa is a dravya. Chapter six (sthūlatvasthāpāna; 44–56) discusses various opinions on the question whether the doṣas are gross (sthūla), subtle (sūkṣma), etc.; the author concludes that they take up a middle position (madhyapramāṇa). Chapter seven (vātadyutpādanotpattyādivārṇana; 57–74) deals with the relationships between the doṣas, together with their guṇas, and the mahābhūtas, together with their guṇas. Chapter eight (vātādiṅṇakarmavārṇana; 75–130) is concerned with the qualities and actions of vāta, pitta and kapha; it lists and defines these. Chapter nine (vātādisvarūpabhedavārṇana; 131–156) describes the five kinds of vāta, pitta and kapha. Chapter ten (prādhānyakhyāpāna; 157–199) discusses the concept of disease (roga) and opinions on the type of causation (kāraṇatva) attributed to the doṣas; the author concludes that the doṣas are both samavāyikāraṇa and nimitta; finally, he deals with āgantū diseases and opinions on their relationship to the doṣas; he is convinced that the doṣas are their main (pradhāna) cause.

TRIDOṢAVIMARŚA by Dharmadatta.⁵⁶⁵

The first part of this treatise consists of a prastāvanā in prose (1–43),⁵⁶⁶ with the subtitle mūlatattvanirūpaṇa, which deals with basic concepts, such as: elements of Sāṃkhya philosophy, the five mahābhūtas, jīvāṇus (regarded as pathogenic micro-organisms), ojas, nija and āgantū diseases, sātnya and asātnya.

The second part, the *Tridoṣavimarśa* properly, also in prose, is about generalities regarding the doṣas (3–4), vāta (5–7), pitta (7–12), kapha (13–18), the signs pointing to excitement of vāta (19–21), pitta (21–24) and kapha (24–27), and, finally, the constitutions (prakṛti) dominated by vāta (27–29), pitta (29–30) and kapha (30–31).

The third part, called *Tridoṣasamgraha*, in prose and verse, and largely consisting of quotations, discusses: the twenty-five tattvas and the guṇas (33–35), vāta (36–78), pitta (79–100), kapha (101–131), together with the treatment of disorders caused by each of them, various particularities regarding the doṣas, disorders brought about when they stay in particular constituents of the body, the characteristics of their āma and nirāma states, etc. (132–152).

Part three is made up of quotations which largely derive from the *Carakaśaṃhitā*, *Suśrutasaṃhitā* and *Vāgbhaṭa*'s works; other sources mentioned by name are the *Bhāvaprakāśa* (130, 131), *Mādhavanidāna* (52, 54, 87, 107, 111), *Śāringadharasaṃhitā* (39, 40, 42, 82, 115), and *Yogaratanākara* (39).

UPADAMŚACIKITSĀSAMGRAHA, compiled by Gaṇeśadatta Śāstrin.⁵⁶⁷

UPADAMŚASUDHĀSINDHU, compiled by Gadādhara Tripathin.⁵⁶⁸

VAIDYAHṚDAYA by Rādhācandra Śarman.⁵⁶⁹

VAIDYAKĪYASUBHĀSITASĀHITYA or *Sāhityakasubhāṣitavaidyaka*, compiled by Bhāskara Govinda Ghāṇekar, a collection of maxims relating to the science of medicine.⁵⁷⁰

VAIDYAKĪYASUBHĀṢITĀVALĪ, compiled by Prāṇajīvan M. Mehtā.⁵⁷¹
VAIDYAŚĪROMAṆĪ by Veṅkaṭarāvu.⁵⁷²

VAMANAKALPATARU by Gosvāmī Rāmaraṅgaśāstrī.⁵⁷³ This short treatise, in forty-seven verses, deals with emesis. It is based on Vāgbhata's *Aṣṭāṅgaḥṛdayasaṃhitā*.

VAṆAUSADHIDARPAṆA or the Ayurvedic Materia Medica, with quotations and copious original prescriptions from selected works, by Kavirāja Virajācaraṇa Gupta Kavibhūṣaṇa.⁵⁷⁴ This is a useful work, describing the names, properties and actions of medicinal plants, arranged according to the Sanskrit alphabet.⁵⁷⁵

VIṢAMAÑJARĪ by Raṅganātha Sakhārāma Lāḷe.⁵⁷⁶

VIṢATANTRACIKITSĀPRAKĀŚA, compiled by Ravidatta Śāstrin.⁵⁷⁷ This work, in verse and prose, consists of seven chapters which are identical with chapters 1–5, 7, and 6 of the Kalpasthāna of the *Suśrutasaṃhitā*.

VIṢAVIDYACINTĀMAṆĪ by Boddikūrapāṭi Veṅkaṭaraṅga.⁵⁷⁸

VIŚIKHĀNUPRAVEŚAVIJÑĀNA⁵⁷⁹ or *Cikitsākarmapraveśa*, written by Gulrāj Śarmā Miśra,⁵⁸⁰ in collaboration with Govind Prasād Upādhyāya.⁵⁸¹

This treatise, partly composed by the author, partly compiled from earlier sources, consists of sixteen chapters (sopāna), dealing with introductory matter (1; maṅgalācaraṇa), general principles (2; viśikhānupraveśa), the examination of the patient (3; rogīparīkṣā), the constitutions (4; prakṛti), the eightfold examination of a patient (5; aṣṭavidhaparīkṣā), general diagnostic principles (6; rogaparīkṣā), some treatments belonging to pañcakarma (7; subjects described are sneha, abhyaṅga, and svedana), emetic and purgative procedures (8; vamanavirecana), clysters (9; basti), errhines (10; nasya), treatment of diseases (11; cikitsā), dosages of medicines (12; mātṛā), the proper times for the administration of medicines (13; auśadhasevanakāla), substances, mainly fluids, to be prescribed together with a drug or after its ingestion (14; sahapāna, ānupāna), urgent treatments (15; ātyayikavijñāna),⁵⁸² and quickly acting medicines (16; āśucikitsā).

The work ends with verses on the purpose of the book and on the author.

The chapter on treatment describes the aetiology, symptomatology⁵⁸³ and therapy of the diseases belonging to the divisions of kāyacikitsā and bhūtaavidyā.⁵⁸⁴ The diseases are arranged in the order of the *Mādhavanidāna*.⁵⁸⁵

Sources mentioned are: *Aṣṭāṅgaḥṛdayasaṃhitā* (often), *Aṣṭāṅgasamgraha* (often), *Āyurvedaprakāśa* (18; 221), *Bhaiṣajyaratnāvalī* (142; 143; 144; 145; 147; 149, etc.),⁵⁸⁶ Bhāvamīśra (216), *Bhāvaprakāśa* (149; 150), *Cakradatta* (57; 106), ūkā on the *Cakradatta* (85), Cakrapāṇi's commentary on the *Carakasamhitā* (131), *Caraka* (often), Dhanvantari (4; 5), Gadādhara (70), Hemādri (125), Jejjāṭa (70), *Lohasarvasva* (227), *Mādhavanidāna* (71; 73; 80; 150; 151, etc.), *Madhukoṣa* (163), *Pañcatantra*

(49), *Rasacintāmaṇi* (216), *Rasatarangiṇī* (231), *Rasopaniṣad*, Śārṅgadharma (123), *Siddhabheṣajamaṇimālā* (223; 227; 234), *Suśruta* (often), *Vaṅgasena* (146), *Yajurveda* (1), *Yogaratanākara*, (164; 199; 215; 228; 232),⁵⁸⁷ and *Yogaratanāvalī* (163).

Sources added in the commentary are: Bhela (94), *Cikitsākalikā* (93), *Gītā* (16; 77), *Govindabhagavatpāda* (20; 21),⁵⁸⁸ Kaṇāda (43),⁵⁸⁹ Kharanāda (79), *Nāḍīvijñāna* (51), *Rasādhyaṅga* (19), *Rasāmṛta* (218), *Rasaratnasamuccaya* (219), *Rudratanta* (62), *Siddhaprayogalatikā* (218),⁵⁹⁰ *Taittirīyopaniṣad* (15), and *Viśvāmitra* (119).

Colleagues who gave recipes to the author are:⁵⁹¹ Bṛhaspati Trigūṇa (243), a friend (242),⁵⁹² the author's guru⁵⁹³ (253; 259; 263), Saṃtoṣaśarma (241), Śivaśarma (260: ratnarāja), Tryambaka Śāstrin (266: svarṇaparpatī), *Vedaprakāśa* (272),⁵⁹⁴ Yādava (247), Yādavaśarma (244), and a yogin (255).

The term on which the title of the work is based, viśikhā, is defined in the opening lines of chapter two;⁵⁹⁵ this term, found in the *Suśrutasaṃhitā*,⁵⁹⁶ designates the qualifications of a physician before he formally enters his profession. Three types of treatment are distinguished, in increasing order of merit: āsurīcikitsā (surgery), mānuṣī cikitsā (treatment with drugs), and daivī cikitsā (treatment with rasayogas) (8–21).

Some ailments known from the later āyurvedic literature are mentioned in chapter sixteen: phiraṅga (229; 231), raktacāpa (248; 249), sujāka (260). A disease borrowed from western medicine is antrapucchabhavaśoṭha (242: appendicitis).

The materia medica, in particular that of chapter sixteen, contains numerous substances introduced in later times: akīka (260; 268), añjavāra (268), candrasūra (274), dambū (251), dambula (260), eraṇḍakarkaṭī (241), gandhavīroṇā (265), guḍamāraka (257),⁵⁹⁷ hīrādokhī (260), jahara (268), jaharamoharā (259), jayapāla (255), karpūrakācarī (247),⁵⁹⁸ kāśībhūmisamudbhavā rājikā (262), kaṭīrāgundra (251), lohabāṇa (249), mārūvmtāka (262), nirañjanaphala (251), paṭhānīlodhra (270), postaka (252), raktabola (228), rūmā (251), saṃgeyaśa (268),⁵⁹⁹ taruṇyarka (247; 273), and ṭṛṇkānta (268; 269).⁶⁰⁰

Opium and *Cannabis* are repeatedly prescribed.

Part 9

Miscellanea

Chapter 1

Works on pākāśāstra

Medical treatises with a title containing the word pāka are either works on cookery in the service of medicine or collections of formulae for the type of pharmaceutical preparation called pāka.

Information on the contents of a treatise is necessary in order to be able to determine to which group it belongs.

AUŚADHAPĀKĀVALĪ.¹

BHOJANAKUTŪHALA by Raghunātha Paṇḍita.²

BRĤATPĀKASAMGRAHA by Kṛṣṇaprasādatrivedin.³ This is probably a modern work.

BRĤATPĀKĀVALĪ, compiled by Gaṅgāprasādaśarman,⁴ son of Guru Dīnalāla Śarman of Dvivedipura, from sources not mentioned by name,⁵ is a collection of seventy-one pākas and related types of preparation.

The statement found in the introductory verses that the essence of therapy consists of pākavidyā and rasāyana relates to the numerous pāka formulae used for rasāyana purposes.

A pāka is defined as a variety of avaleha (linctus), the difference being that an avaleha is a soft, a pāka a solid type of preparation. The general procedures for preparing a pāka and an avaleha are described in the introductory verses. Although pākas, together with avalehas, constitute the majority of the formulae, the treatise also contains recipes for a guḍa, some khaṇḍas, a lauha, and some modakas.

Substances frequently used as ingredients are ākalla(ka),⁶ opium,⁷ and the seeds and seed capsules of *Papaver somniferum* Linn.⁸ Some other noteworthy substances are cīnīkabāba,⁹ copacīnī,¹⁰ khurāsāna,¹¹ mastakī,¹² and uṭaṅgaṇa.¹³

A number of recipes which, on account of the presence of ingredients of later origin, cannot be very old, are nevertheless attributed to ancient authorities like Ātreya (15–16: jātīpattryavaleha) and Bhāradvāja (108–109: copacīnīpāka). One formula (an avaleha called muphara: 106–107) has been borrowed from Islamic medicine; the same may apply to the sālīmapāka (36).

The *Br̥hatpākāvalī* dates from the beginning of the twentieth century.¹⁴

KṢEMAKUTŪHALA by Kṣemaśarman.¹⁵

PĀKACANDRIKĀ by Āṇṇajī Ballāla Bāpaṭa Indurakara Vaidya.¹⁶

PĀKADARPAṆA or *Nalapāka*,¹⁷ ascribed to king Nala,¹⁸ is a work on the culinary art, intended for the royal kitchen.

The treatise consists of 760 verses,¹⁹ arranged in eleven chapters (*prakaraṇa*),²⁰ and has been composed in the form of a dialogue between king Rṭuparṇa and king Nala.²¹ The latter, who has adopted the name of Bāhuka after his encounter with the serpent king Karkoṭaka, offers his services as an expert in cookery to king Rṭuparṇa, who then asks him questions on the origin of his knowledge. Nala begins telling the story of his journey to Damayantī's *svayamvara* and his meeting a group of four gods, the four guardians of the quarters of the sky, also going there. These gods promise to grant him four boons if he is willing to act as their messenger. After Nala's acceptance and deliverance of the message to Damayantī, Indra bestowed on Nala the faculty of making himself invisible, Agni that of controlling fire, Yama the expertise in cookery, and Varuṇa the faculty of controlling the watery element.²² Having listened to Nala's narrative, Rṭuparṇa requests him to expound his knowledge of the culinary art (1.1–22). Nala complies and proceeds with giving detailed answers to Rṭuparṇa's questions.

Chapter one, by far the longest (499 verses), deals first with some general topics: the six kinds of food,²³ the importance of food in preventing diseases, the characteristics of a good cook, the eight faults (*doṣa*)²⁴ to be avoided in well-prepared rice dishes (1.23–56), and the right way of preparing various rice dishes, *utkrāṇodaka* (meat broth), *taharī*,²⁵ and rice boiled in broth (*māṃsaudana*); this section ends with the prevention of the production of *garala*²⁶ (1.57–119). The chapter proceeds with the description of various varieties of *sūpa*²⁷ (1.121–141), *temana*²⁸ and *khala*,²⁹ dishes made of *kulittha* beans, and recipes for flavoured types of *navanīta* (fresh butter) and ghee (1.142–199). The remaining part of the chapter is devoted to dishes prepared with vegetables or fruits (1.200–497).

Chapter two is concerned with the regimen during the seasons (*ṛtudharma*) and the six parts of day and night corresponding to them. Chapters three to eleven are successively about *bhakṣya* (sweets), *pāyasa* (milk pudding) and *pānaka* (refreshing drinks), *pānaka* again, *yūṣa* (soups), *ghṛtāṇṇa* (dishes with rice and ghee as their main ingredients), *lehya* (soft dainties), *śaityajala* (cool and scented water), *kṣīrapāka* (boiled milk with water, sugar, fragrant flowers or fruits added to it), and *dadhi* (thick sour milk with flavouring and fragrant substances added).

The recipes of the *Pākadarpaṇa* are modelled on a common pattern and written in a clear style. Each recipe is followed by an enumeration of the medicinal properties and actions of the dish.

Nala is quoted by Cakrapāṇidatta,³⁰ *Dalhaṇa*,³¹ Meghadeva in his commentary on the *Mādhavadravyagūṇa*, Nīścalakara,³² Śīlāṅka,³³ Śivādāśasena,³⁴ *Toḍara*,³⁵ Trimalla,³⁶ and Vopadeva.³⁷ Nala is referred to in the *Kāśyapīyakṣisūkti*,³⁸ Kṣemaśarma's *Kṣemakutūhala*,³⁹ and the anonymous *Pākaśāstra*. Nala was one of the sources of Basava's *Śivatattvaratnākara*.

Some noteworthy terms employed by the author of the *Pākadarpaṇa* are: *aṭṭālaka* (a refrigerating device; 1.94, 197, 209, 217; 4.29), *haraṭṭaka* (a grinding stone; 1.129), *kalkinī* (a knife; 1.219 and 287), *pravaṇī* (a wide-mouthed pot; 1.222, 132, 138, 147, 202), *pūgapatṭa* (1.173, 216, 226, 231, 245),⁴⁰ *taharī* (1.81–85), *temana* (1.142–150

and 155–157),⁴¹ and *utkrāṇodaka* (1.65–70).

Interesting names of vegetables and fruits are: *ākalī* (1.485), *alasanḍī* (1.262),⁴² *ālopā* (1.484),⁴³ *bāṣpa* (1.341),⁴⁴ *cakravarta* (1.323),⁴⁵ *culī* (1.336), *cūrnīkā* (1.484), *humkāra* (1.295), *kṣudradanī* (1.263 and 494), *kurpāṭaka* (1.265), *latāculī* (1.338), *madapīṭikā* (1.484), *mahābāṣpa* (1.356), *mahāculī* (1.339), *nameru* (6.10), *rājarambhā* (1.211), *raktabāṣpa* (1.357), *saikasa* (1.494), *sāmudraphala* (6.20),⁴⁶ *sāraṅga* (6.22), *satphalā* (6.7; 10.18), *śīlāchillī* (1.340), *uṇḍūka* (1.377), *virūpaka* (1.296),⁴⁷ and *viṣaghnī* (1.484).⁴⁸

No particulars are known about the actual author.

The date of composition of the *Pākadarpaṇa* remains undetermined. The quotations from Nala are of no avail because they cannot be traced in the printed text.⁴⁹ The earliest author to refer to some work on cookery by Nala is Cakrapāṇidatta. Some names of plants may point to a period not earlier than about A.D. 1200.⁵⁰ Since chilli is absent from the *Pākadarpaṇa*, it dates probably from before the introduction of this type of pepper into India in the seventeenth century.⁵¹

PĀKĀDHIKĀRA.⁵²

PĀKĀDHIKARAṆA.⁵³

PĀKĀDHYĀYA, anonymous.⁵⁴

PĀKĀDHYĀYA by Harṣakīrti Upādhyāya.⁵⁵

PĀKĀDISAṆGRAHA.⁵⁶

PĀKAKRIYĀ.⁵⁷

PĀKAMĀRTAṆA.⁵⁸ Sources quoted are: *Pākasudhākara*, *Pākāvalī*,⁵⁹ *Sārasaṅgraha*, *Śārngadhara*, *Vaidyavilāsa*, *Vaṅgasena*, *Vṛnda*, *Yogacintāmaṇi*, *Yogarata*, and *Yogarataṇvālī*.⁶⁰

One of the introductory verses claims that the essence of the medical art consists of *pākavidyā* and *rasāyana*.⁶¹

PĀKANIGHAṆṬU.⁶²

PĀKAPARIBHĀṢĀ.⁶³

PĀKAPRADĪPA by Gaṇeśaśarma.⁶⁴ This work, in 535 verses, consists of a collection of eighty-six *pākas* and *avalehas*, preceded by an exposition on the preparation of a *pāka* and various rules connected with this subject (2–17).

Sources are not referred to, except once (465–466: *pāthāvaleha* from the *Āśvina-saṃhitā*).

Many *pākas* are attributed to particular authorities: the *Aśvins* (55–68; 214–228; 326–335; 374–382; 388–392; 424–430), *Ātreya* (232–239), *Bhāradvāja* (310–317; 352–357), *Bhṛgu* (165–169), *Brahmā* (336–344), *Dhanvantari* (487–499), *Gahananātha* (502–508), *Gorakha* (529–532), *Mahādeva* (469–482), and *Śiva* (33–39).

Noteworthy items of the *materia medica* are: *ākalla* (245), *ākallaka* (88; 134; 217; 279; 319; 408; 420; 433), *arkakarabha* (24), *asāla* (345), *cīṇīkabābā* (88), *copacīnī* (220; 310; 318), *jhiñjhiñī* (151), *kabābā* (235), *kabābaka* (448), *kallaka* (59), *karabha*

(97), kauñca (76), khasaphala (24), khurāsāna (235), khurāsānikā (24), kuhū (25), lobāna (220), mājū (200), mājūphala (24), mastakī (97; 220), and siṇāvāsika (211).

Information on the author is not available.

PĀKAPRADĪPA by Ravidattavaidya.⁶⁵ Probably a modern work.

PĀKĀRNAVA.⁶⁶ This work⁶⁷ contains the recipes of fifty-three pākas.⁶⁸ Some of these are: āhaphenapāka, akalakarāpāka, araḍūsāpāka, bhilāvāpāka,⁶⁹ dālacinīpāka,⁷⁰ kauchapāka,⁷¹ kuḍāpāka,⁷² rīṅgañīpāka,⁷³ sālimapāka,⁷⁴ and sopārīpāka.⁷⁵

One of the pākas described, the godhūmapāka, is said to derive from Rudra and was also proclaimed by Svayambhū for the benefit of Pārvaṭī.⁷⁶ Opium (ahipheṇa), sarsaparilla (copacīnī), and rose water (gulābapāka) are mentioned.

Works and authors quoted are: *Ānandamālā* (by Ānandabhāratī), *Bhāvaprakāśa*, *Manoramā*,⁷⁷ *Ṭoḍarānanda*, *Vaidyavallabha*,⁷⁸ Vaṅgasena, and *Yogacintāmaṇi*.⁷⁹

The references to the *Bhāvaprakāśa* and *Ṭoḍara* prove that the work cannot be earlier than about A.D. 1600.⁸⁰ The MS is written on paper that may be about two hundred years old.⁸¹

PĀKASAMGRAHA.⁸²

PĀKASĀSTRA, anonymous.⁸³

This work deals with the preparation of various dishes and gives their medicinal properties. It begins with a bhaktādi prakaraṇa; the second prakaraṇa is about phalāśā-kādi; the treatise ends with a bhojanaprakaraṇa.⁸⁴

Some of the preparations described in the bhaktādi prakaraṇa are: maṇḍa, yūṣa, sūpa, pāpara,⁸⁵ pāyasa, polikā, maṇḍikā, yamalaroṭikā, pūrikā, kacavallī, vaṭaka, pakvavaṭī, pānaka, rāgakhāṇḍava, śikhariṇī, vāsavatī, phenikā, laḍuka, bindumodaka, dugdhakarāñjikā,⁸⁶ lāpasī,⁸⁷ candrahāsī, jalebī, kasāra,⁸⁸ koharī, bahuṛī, and umbikā.⁸⁹

The description of jalebī in this *Pākaśāstra* was regarded as the earliest one known by P.K. Gode.⁹⁰

The only authority quoted is Nala.⁹¹

The manuscript of this work dates from A.D. 1677/78.⁹²

PĀKASĀSTRA by Bhīmasena.⁹³

Subjects dealt with are: the mode of forming clarified oil from the milk of jack fruits and from bananas; the preparation of ghee, curds and buttermilk; asclepias berry and wild palma christi shrub; the preparation of a curry from the seeds of the nimba tree that is not bitter; the preparation of pulse dishes; the use of the juices of lime and tamarind; the preparation of various cakes; the preparation of pāyasa and various pānakas.⁹⁴

The author calls himself Pāṇḍusūnu and Pavana- or Samīraṇasūnu (i.e., Bhīmasena).⁹⁵ The work, said to have been written in Virāṭanagara,⁹⁶ is called a sūpa-tantra.⁹⁷

The Pāṇḍavas lived in the thirteenth year of their exile, disguised as servants, at

the court of Virāṭa, king of the Matsyas; Bhīmasena served as the cook of the royal household.⁹⁸

Other works attributed to Bhīmasena are the *Abhidhānacandrikā*,⁹⁹ *Vaidyabhūṣa-ṇā*,¹⁰⁰ and *Vaidyabodhasaṃgraha*.¹⁰¹

The Bhīmasena who wrote the *Abhidhānacandrikā*, *Pākaśāstra* or *Sūpaśāstra*, and *Vaidyabhūṣaṇā* lived in the nineteenth century according to A. Rahman.¹⁰²

PĀKASĀSTRA by Devīsimha.¹⁰³

PĀKASĀSTRA by Jayagovinda.¹⁰⁴ This work, written in Hindī, deals with the preparation of various dishes for a feast and describes their physiological effects.¹⁰⁵

The author enjoyed the patronage of a certain Hṛdayanarendra.¹⁰⁶

PĀKASĀSTRA by Śrīmalla.¹⁰⁷

PĀKASĀSTRA by Vinḍu.¹⁰⁸

PĀKASUDHĀKARA.¹⁰⁹ Quoted in the *Pākamārtaṇḍa*.

PĀKĀVALĪ.¹¹⁰ Several texts of this title are known.¹¹¹

One of these texts, edited under the title of *Pākāvalī*¹¹² and by an unknown author, is of the same type as a yogasaṃgraha, containing formulae for compound medicines against various diseases in the form of a pāka, avaleha, āsava, modaka, vaṭī, etc. Among the disorders mentioned are, for example, śleṣmapitta (36; 43), somaroga (46), and jaratpitta (36).

Noteworthy substances prescribed in this treatise are: opium (ahipheṇa: 5; 16; 41; 42; phanipheṇa: 48; sarpaphena: 41), ākalka (39), ākalka (16), ākalka (4; 32; 45; 47), ākārakarabha (41), copacīnī (47), covacīnī (34), drekkā (25),¹¹³ dvandvaparnī (43),¹¹⁴ dvīpāśvā (47: = copacīnī), dvīpottharāsnā (34: = covacīnī), gulāba (42), hemāmbhodhara (13),¹¹⁵ khākhasa (28; 41), mastakī (38; 43), pārasī vacā (43),¹¹⁶ uṣṭrakāṇṭaka (45), and uṣṭraphala or -phalā (42).

Two recipes for a śaṅkhadrāva are given (31–33).

The only treatise quoted is the *Rasārṇava* (23).

The above evidence indicates that this *Pākāvalī* is later than the *Śārngadharaśaṃhitā* (jaratpitta; ākārakarabha) and *Bhāvamiśra* (copacīnī; pārasī vacā). The presence of a recipe for the preparation of rose water (gulābapāka) and the two recipes for the preparation of a mineral acid (śaṅkhadrāva) point to a period of composition not earlier than the seventeenth century.

PĀKĀVALĪ by Govindarāja, son of Nāganātha.¹¹⁷

PĀKĀVALĪ by Kāśinātha.¹¹⁸

PĀKĀVALĪ by Kulāvataṃsa.¹¹⁹

PĀKAVIDHI by Divākaracandra.¹²⁰

SŪDASĀSTRA.¹²¹ A work of this name on cookery is quoted or referred to by Anatakumāra,¹²² Cakrapāṇidatta,¹²³ Hārānacandra,¹²⁴ Jejjāta,¹²⁵ Kṣīrasvāmīn,¹²⁶ Niśca-

lakara,¹²⁷ Rāyamukuta,¹²⁸ Śivadāśasena,¹²⁹ Śrīdāsapaṇḍita,¹³⁰ Śrīkaṇṭhadatta,¹³¹ and
 Ṭoḍara.¹³² Some of these quotations may be from Nala's *Pākadarpaṇa*.
 Bhavyadatta's *Yogarātnākara* contained a *sūdaśāstraparicheda*.¹³³

SŪPAŚĀSTRA.¹³⁴ A *Sūpaśāstra* is quoted in Vācaka Dipacandra's *Laṅghanapathyanir-
 ṇaya*¹³⁵ and Vopadeva's *Siddhamantraprakāśa*.¹³⁶

Chapter 2 Works on nāḍīśāstra

ABHINAVANĀḌĪTANTRA by Viśvanāth Dvivedī.¹

BHĀRATĪYANĀḌĪVIJÑĀNA by Prabhākaradevaśarman Caṭṭopādhyāya² is a modern monograph on the pulse in about 500 verses, divided into seven chapters.

Chapters one to four deal with general aspects of the examination of the pulse and the recognition of disorders of the doṣas. Chapter five is about pulses which indicate a fatal outcome within a specified period of time and about special cases which, although seemingly grave, are prognostically favourable. Chapter six describes the pulses characteristic for a long series of diseases and chapter seven signs indicating the approach of death.

The author does not indicate his sources,³ but a large part of his treatise is based upon the works of Kaṇāda, Rāvaṇa and others.⁴

The colours of the vāta-, pitta- and kaphanāḍī are described as respectively dark blue (nīla), pale (pāṇḍura) and white (śveta).⁵ The problem of the conflicting views on the location of the pulses of the doṣas with respect to the three fingers of the examiner⁶ is solved by declaring that no importance should be given to this location because the doṣas are sufficiently characterized by the movements of the pulse.⁷ The list of diseases together with their pulses is longer than in the works of Kaṇāda, Rāvaṇa and Bhūḍharabhaṭṭa.⁸

The author was a Principal of the Calcutta College of Āyurveda and wrote his book between the years 1930 and 1934.

BHAVĀNĪNĀḌĪVIJÑĀNA.⁹

DHARMAVAIDYAKANĀḌĪPARĪKṢĀ by Merutuṅga.¹⁰
 NĀḌĪBHEDA.¹¹

NĀḌĪCAKRA¹² is a remarkable treatise on the examination of the pulse, full of interesting details on this subject and other medical topics.

The work¹³ consists of 292 verses, arranged in twelve chapters (paṭala). It is composed in the form of a dialogue between Śiva and Pārvaṭī. The maṅgala is addressed to Śiva.

The introductory verse says that the *Nāḍītantra* will be expounded. The next few verses (2-6ab) relate that Pārvaṭī asked Śiva for instruction in the difficult art of nāḍīśāstra. Śiva replies that he will transmit to her the very subtle *Nāḍīcakra*.

The exposition begins with the statement that the nāḍīs are said to be 72,000 in

number¹⁴ by the great sages; authorities and works referred to are: Bhela, the *Caraka-sāstra*, Suśruta, the *Tantravistara*, the *Karṇikokta*,¹⁵ Yājñavalkya, and the *Yogaratanāvalīyaka* (7).

The importance of the science of the pulse is highlighted (10–12). Three diagnostic methods are mentioned: touching (*sparsana*), questioning (*praśna*) and examining (*darśana*) a patient (13–14).¹⁶ Touching, i.e., feeling the pulse at the wrist (*hastamūla*), ankle (*pādamūla*), or both wrist and ankle, enables a physician to diagnose fever, disorders of the *doṣas*, the state of the digestive fire, ailments caused by fasting and waking at night, an intensive activity of the digestive fire (*atyagni*), deficiency of the semen (*hīnavīryatva*), disorders arising from fear (*bhaya*), grief (*śoka*) and confusion (*bhrama*), ailments arising from food of a particular taste,¹⁷ painful conditions brought about by (an excess of) physical exercise and sexual activity, and disorders of digestion (*ajīrṇa*) (15–19ab). Questioning reveals the presence of *kukṣīśūla*, *udāvarta*, *pārśvaśūla*, *bhagandara*, *sandhivāta*, *haemorrhoids* (*arśāṃsi*), the twenty urinary disorders (*mūtraroga*), *skhaladvīrya*,¹⁸ *śīroroga*, poisoning (*viṣasevā*), *antraniḥṣṛti*,¹⁹ *hastapādādidāha*,²⁰ diseases of the penis, bladder and anus, and bleeding from the female genital organs (*raktasrāva bhagotthita*) (19cd–22ab). Examination discloses the presence of *kāsa*, *śvāsa*, eye diseases, *piṭakāḥ*, *vraṇa*, *aṇḍavāta*, *śopha*, *pāṇḍu(roga)*, *kāmila*, *pīnasa*, *asthibhaṅga*, *ūrubhaṅga*, *nāḍībhedha*,²¹ *galagraha*, *karṇārbuda*, *mūrchā*, *arśāṃsi* (*haemorrhoids*), *plīhan*, *ānāha*, *udara*, *sakthiśopha* (swelling of the thighs or legs), *galagranthi*, *upajihvā*, *masūrikā*, the eighteen forms of *kuṣṭha*, *ḍamaru*,²² and *gaṇḍamālikā* (22cd–25).

Finally, the pulse at the wrist is said to reveal all diseases, in the same way as the strings of a *viṇā* may produce all the *rāgas* (26–28ab).

Chapter two (28cd–46) mentions a *kanda* (bulbous structure), located somewhat downward from the navel, and measuring four *aṅgula* in breadth and two *aṅgula* in height,²³ as the place of origin of the 72,000 *nāḍis* (28cd–32), which are divided into 30,000 male, 30,000 female, and 10,000 neuter ones, distributed, respectively, over the right, left and middle part of the body (33–34). One hundred and one among these are of more importance; thirteen is the number of the most prominent ones (35ab).

A main group of *nāḍis* is formed by the pentad consisting of *Idā*, *Pīṅgalā*, *Suṣumnā*,²⁴ located in the upper half of the body, together with *Subalā* and *Balā*, located in the lower half. *Idā* is found on the left, *Pīṅgalā* on the right, and *Suṣumnā* in the middle. *Idā* is the main carrier of the *doṣas* in females; *Pīṅgalā* is its counterpart in males. The *Suṣumnā*, the seat of *Brahmā*, transports *vāyu*, the basis of breathing (38–43ab). A human being is said to breathe 21,600 times each day and night (43cd–44ab).²⁵

Chapter three (47–55) describes where the main *nāḍi* should be examined by a physician: in males at the left, in females at the right side of the body, in cows at both sides of the nose, in horses at the ears, and in elephants at the mouth, tip of the nose, eyes, tail, and cheeks (51–52).

Chapter four (56–65) is concerned with the way of feeling the pulse and the exact places where to put the fingers (56–59). It describes in which disorders which pulse should be taken (60–63), and which pulse should preferentially be examined in the various periods of life (64–65).

Chapter five (66–80) is about characteristics of the pulse during the three parts of day and night (66) and during the six seasons (67–69ab). Each season endows the pulse with a characteristic type of pulsation (*gati*), resembling the way in which a particular animal moves about. The chapter proceeds with signs of the pulse connected with the preponderant taste of the food enjoyed;²⁶ these signs consist again of ways of pulsation resembling the gait of particular animals (69cd–72ab). A combination of the sweet and sour tastes gives rise to the same signs as those attributed to *kapha*, a combination of the pungent and saline tastes to the signs of *pitta* (72cd–73ab).²⁷ The tastes which should predominate in the food taken in a particular season are mentioned (75–76ab), as well as the relationships between the *doṣas* and the seasons (76cd–79ab) and those between the *doṣas* and the *mahābhūtas* (79cd–80).

Chapter six (81–92ab) describes the radial pulse (*jīvanāḍī*), the way to take it, the signs of the *doṣas*, signs indicating curability or incurability, and conditions in which it is either practicable or impracticable to feel the pulse.

Chapter seven (92cd–95) instructs the physician to diagnose *vāta* disorders with the index, *pitta* disorders with the middle finger, and *kapha* disorders with the little finger. Patients up to the age of fifty should be examined with the fingers of the right, older patients with those of the left hand.

Chapter eight (96–100) specifies the types of pulsation characteristic of disorders of one *doṣa* or two *doṣas*; each *doṣa* or combination of two *doṣas* presents a type of pulsation resembling the movement of a particular animal.

Chapter nine ((101–153) describes first the pulse that is typical of involvement of all three *doṣas* (101–102). Subsequently, it enumerates a group of ten *nāḍis*: *Idā*, *Pīṅgalā*, *Suṣumnā*, *Gāndhārī*, *Hastabīja*, *Pūṣā*, *Payasvinī*, *Alambu*, *Lakala*, and *Śāṅkhinī* (103–104ab).²⁸ The six cakras are mentioned,²⁹ their seats, and the parts of the body where the ten *nāḍis* are found (104cd–108).

The remaining part of the chapter is devoted to anatomy. All the verses on this subject have been borrowed from the *Śārīgadharaśaṃhitā* (1.5), with the exception of 125–130, dealing with the seven layers of the skin and the diseases located in these layers.³⁰

Chapter ten (154–182) describes the five *mahābhūtas* (154–158), disorders arising from deficiency of one of these (159–160), the connections between the *mahābhūtas* and the *doṣas* (161), between the *mahābhūtas* and the seven bodily elements (162) and the tastes (163–164), the colours of the *mahābhūtas* (165), the *mahābhūtas* preponderantly present in particular constituents of the body (166–170), the ratios of the *mahābhūtas* in several groups of animals (171–180), and the connections between the *mahābhūtas* and the seasons (181–182).

Chapter eleven (183–273) is devoted to a classification of diseases. Almost the whole of this chapter has been taken from the *Śārīgadharaśaṃhitā* (1.7). Exceptions are verses 184–185,³¹ 186ab, 204–207,³² and 272–273.³³

Chapter twelve (274–292) describes that *Pārvatī* wonders how disorders of the *doṣas*, which have their seats in various parts of the body, can be diagnosed by means of the radial pulse. Being puzzled, she asks *Śiva* for elucidation.

Śiva informs her of some anatomical facts. He declares that the *mūlādhārācakra*³⁴ contains a *vidhigranthi*, which is the seat of *vāta*; similarly, the heart-lotus³⁵ has a

harigranthi, the seat of pitta; at the throat one finds a haragranthi, which is the seat of kapha.³⁶

The nāḍīs originate from the mūlakanda. Three among them, which have the nature of Brahmā, Viṣṇu and Śiva, are more important, but the Suṣumnā is the foremost. This very subtle Suṣumnā runs from the seat of vāta to the seat of pitta, thence to the seat of kapha, to reach finally the Sahasrārā³⁷ at the top of the head. From the top of the head it goes downwards, branches off, and passes through the forehead, ears, the region between the eyebrows, nostrils, throat, and shoulders, ending at the wrists, where the pulse can be examined. Other branches pass through the sides of the abdomen and the hips, ending at the ankles, where the pulsations are perceptible.

The treatise ends with some verses explaining again that the state of the doṣas is diagnosed by help of the three fingers of the physician.

The author is unknown. The *Nāḍīcakra* must be later than the *Śāringadharasamhitā*, on account of the large number of verses common to both works.³⁸

NĀḌĪCAKRANIDĀNA.³⁹

NĀḌĪCAKRANIRŪPA.⁴⁰

NĀḌĪCAKRAVIDHI.⁴¹

NĀḌĪDARPAṆA⁴² by Dattārāma,⁴³ son of Śrīkṛṣṇalāla,⁴⁴ is a treatise in 217 verses, arranged in three chapters (avaloka).

Although stressing the importance of aṣṭasthānaparīkṣā (1.6) and referring to various elements of this procedure (1.11, 12, 14), the work is exclusively devoted to nāḍīparīkṣā. The author emphasizes that the examination of the pulse can be learnt by practice only, not from books (1.24). The cause of the pulsation of the arteries is said to be the contraction of the heart; the circulation of the blood is known to the author (1.31–35).

Other subjects dealt with are: the three types of nāḍī (vāyuvahā, mūtraviḍasthira-savāhinī, āhāravāhinī; 1.37);⁴⁵ the total number of nāḍīs (thirty-five millions),⁴⁶ the gross nāḍīs (1,072 in number), and the twenty-four main nāḍīs (1.41–45); the places where to feel the pulse (1.46–55); suitable and prohibited times for the examination of the pulse; (2.1–3); suitable and unsuitable patients (2.6–7); the correct procedure for examining the pulse (2.8–20); the characteristics of a normal pulse (2.21); the deities presiding over the various pulses (2.22); the colours of the nāḍīs (2.23); the characteristics of the pulse in disturbances of the doṣas (2.26–59) and the author's own opinion on this subject (2.33–46); the pulses indicating curability and incurability or approaching death (2.60–95); the articles of food to be prescribed in patients with an abnormal pulse (2.99–106); the pulse in various disorders (3.1–28); the number of pulsebeats (3.29–41).⁴⁷

Sources are not mentioned, but the major part of Kaṇāda's *Nāḍīvijñāna* forms part of the *Nāḍīdarpaṇa*.

The *Nāḍīdarpaṇa* is quoted by Prabhakar Chatterjee in his *Bhāratiyanāḍīvijñāna*⁴⁸ and Satyadeva Vāsiṣṭha in his commentary on Rāvaṇa's *Nāḍīparīkṣā*.

Dattārāma was a resident of Mathurā.⁴⁹ The references to the functions of heart

and lungs and to the circulation of the blood enable us to assign the *Nāḍīdarpaṇa* to the nineteenth century. Edition d has two additional chapters on pulse-examination according to Yūnānī (twenty-four verses) and western medicine (eighteen verses).

NĀḌĪGRANTHA.⁵⁰

NĀḌĪJĪVANA.⁵¹

NĀḌĪJĪNĀNA attributed to Ātreya.⁵²

NĀḌĪJĪNĀNADARPAṆA, a work on the pulse and some related subjects in 252 verses by Bhūddharabhaṭṭa.⁵³

The treatise covers all the subjects usual in a work on the pulse, but it deals with other diagnostic procedures as well, namely the examination of the eyes (netraparīkṣā; 222–228), tongue (jihvāparīkṣā; 229–230), nose (nāsikāparīkṣā; 231), faeces (malāparīkṣā; 232–234), urine (mūtraparīkṣā; 235–247), and menstrual discharge (ārtavaparīkṣā; 248–252).⁵⁴ This explains that the *Nāḍījñānadarpaṇa* has more verses on general aspects of medicine than the average text on nāḍīparīkṣā and that various types of parīkṣā are referred to in its introductory part as indispensable procedures which have to precede any therapeutic action.

The list of pulses characteristic for particular diseases (79–166) is much longer than in the monographs attributed to Kaṇāda and Rāvaṇa. The same applies to the list indicating a fatal outcome in general or death within a specified period of time (189–220).

The author does not refer to his sources by name, but a comparison with the treatises of Kaṇāda and Rāvaṇa learns that he has incorporated at least half of Kaṇāda's work and some verses of Rāvaṇa.

Fourteen main nāḍīs are mentioned by name: Idā, Piṅgalā, Suṣumnā, Sarasvatī,⁵⁵ Vāruṇī,⁵⁶ Pūṣā,⁵⁷ Hastijihvā,⁵⁸ Yaśasvinī,⁵⁹ Viśvodarā,⁶⁰ Kuhū,⁶¹ Śaṅkhinī,⁶² Payasvinī,⁶³ Alambuṣā,⁶⁴ and Gāndhārī⁶⁵ (30–32).⁶⁶ Idā, Piṅgalā and Suṣumnā are the most important among these, and Suṣumnā, located in the backbone and the head, is the foremost of the three (32–33). The frequency of the beats of the pulse in the various periods of life is described (50–53).⁶⁷ The pulse should be examined at six places: the hands, the feet and the temples (55), or at eight: the hands, the feet, the sides of the throat and near the two sides of the nose (56). The pulses felt at the sides of the nose and at the throat reveal particular disorders (57 and 59). The span of life as determined by the pulse is described (174–176).

The examination of the nose and of the menstrual discharge are rarely mentioned in other treatises.

No particulars are known about the author and his date. He is later, in any case, than the period of composition of the treatises attributed to Kaṇāda and Rāvaṇa.

NĀḌĪJĪNĀNADĪPIKĀ.⁶⁸

NĀḌĪJĪNĀNAPRADĪPIKĀ.⁶⁹

NĀḌĪJĪNĀNAPRAKĀŚIKĀ.⁷⁰ The number of openings⁷¹ of the nāḍīs, which are connected with the hairs, and from which drops of sweat (gharmabindu) ooze out, is thirty-

five millions (3).⁷² One main nāḍī, the origin of all the others, is the pathway of vāyu, and has its root in the upper part of the body, while its branches reach downwards (4). The fourteen most important nāḍīs, which carry prāṇa, and are established in the jīvakośa, are: Iḍā, Piṅgalā, Suṣuṃṇā, Sarasvatī, Vāruṇī, Pūṣā, Hastijihvā, Yaśasvinī, Viśvodarī, Kuhū, Śaṅkhinī, Payasvinī, Alambusā, and Gāndhārī (10–13). Ten among these nāḍīs convey the ten kinds of vāyu. Iḍā, Piṅgalā and Suṣuṃṇā course in an upward direction; Gāndhārī and Hastijihvā provide movement to arms and legs; Alambusā and Yaśasvinī are located in the right, Kuhū and Śaṅkhinī in the left half of the body (14–16). The locations of the terminals (dvāra) of the ten (vāyu-transporting) nāḍīs: Iḍā ends in the left nostril, Piṅgalā in the right nostril, Suṣuṃṇā in the opening (randhra) (at the top) of the spinal column (vaṃśa), Gāndhārī in the left eye, Hastijihvā in the right eye, Pūṣā in the right ear, Yaśasvinī in the left ear, Alambusā in the mouth, Kuhū in the root of the penis, and Śaṅkhinī in the crown of the skull (17–19).⁷³

The ten kinds of vāyu are: prāṇa, apāna, samāna, udāna, vyāna, nāga, kūrma, kṛkara, devadatta, and dhanañjaya;⁷⁴ the first five form the more important group; prāṇa and apāna are the most important among them; prāṇa is more important than apāna (20–21); the nāḍīs in the ears perceive sounds, those in the eyes forms, those in the nose smells; the one situated in the tongue perceives tastes, those in the skin perceive sensations of touch; those in heart and mouth give rise to sound; manas, buddhi, etc., are established in the heart (22–23).

Gāndhārī is located behind Iḍā; it has the colour of a peacock's throat and runs from the left foot to the left eye (25). Hastijihvā lies to the front of Iḍā; it has the colour of an utpala (blue water-lily) and runs from the left part of the head to the big toe of the left foot (26). Pūṣā lies behind Piṅgalā; its colour is like that of a dark cloud; it runs from the right eye to the sole of the right foot (27). Alambusā lies to the front of Piṅgalā and is red in colour; it runs from the right eye to the big toe of the right foot (28). Yaśasvinī, lying in front of Piṅgalā, has the hue of a conch and runs from the right part of the head to the big toe of the right foot (29). Śaṅkhinī is located between Gāndhārī and Sarasvatī; it is golden in colour and runs from the left foot to the left ear (30). Kuhū is located between Vāruṇī and Pūṣā; it is white in colour and runs from the big toe of the right foot to the top of the head (31). The most important among these nāḍīs are Viśvodarī, Śaṅkhinī, Rāvanā, and Sarasvatī (32).⁷⁵ Suṣuṃṇā, located in the brahmarandhra, on the road to final liberation (muktimārga), is invisible (avyakta) and associated with Viṣṇu (33). The three main nāḍīs are Iḍā, Piṅgalā and Suṣuṃṇā; Suṣuṃṇā is foremost among them (34). Iḍā runs on the left side, Piṅgalā on the right side, and Suṣuṃṇā in the middle; all three are pathways of vāyu (35). Iḍā has the lustre of a conch and the moon, Piṅgalā is white and red (36). Iḍā is a seat of the moon, Piṅgalā of the sun, Suṣuṃṇā of the wind (marut); Iḍā is a seat of rajas, Piṅgalā of tamas, Suṣuṃṇā of sattva; Iḍā is associated with the night, Piṅgalā with the day (37). Iḍā has the nature of vāyu, Piṅgalā that of fire, while Suṣuṃṇā, lying on the pathway to the brahmadvāra (= brahmarandhra), has the nature of both (38).

The heart resembles an inverted lotus bud, decorated with perforations (39). Piṅgalā has the fire maṇḍala as its dwelling place (gocara) and is called devayāna (40).⁷⁶ Iḍā has the somamaṇḍala as its dwelling place and is called pitryāna (41).⁷⁷ The long

(series of) bone(s) in the back, extending from the anus to the head, and resembling the neck (daṇḍa) of a vīṇā, is called the brahmadāṇḍa (42). The delicate hole at its upper end is called brahmanāḍī; the subtle Suṣuṃṇā lies between Iḍā and Piṅgalā (43). The jīva is established in the body, which is at some places like a cakra, at other places like a kośa, or again like a jīvagrha (48). The jīva roams through the body, mounted on the prāṇas; it resembles a spider in its web (49). The ten seats (āyatana) of prāṇa are: the umbilical region, ojas, the anal region, semen, the blood, the temples, the head, the kāṇḍa, and the heart (51).⁷⁸ Viśvodarī is thirty-two hasta in length; that part of it which is present in the neck measures one hasta (52). The āmāśaya is located at a distance of ten hasta from this (part of Viśvodarī) and the pacyamānāśaya at a distance of ten hasta from the āmāśaya (53). The distance between pacyamānāśaya and pakvāśaya is ten hasta again; the guhyadeśa (region of the genitals and anus) measures one hasta; its nāḍī resembles the convolutions of a conch (54).

The ingested food passes through āmāśaya, pacyamānāśaya and pakvāśaya; the (digestive) fire is located above the pakvāśaya (55). The rasa derived from the food passes through the nāḍī of the navel and goes to all parts of the body, impelled by vāyu (56). The umbilical region has the form of a tortoise (kūrma); the eight limbs of this tortoise are connected with the eight mahānāḍīs; four among these are in the region of the back, four in the region of the chest (kroḍa) (57). Two of the nāḍīs in the back and two in the chest run upwards, the other four downwards; the nāḍīs running upwards split into two branches (pallava) in the region of the throat; one of these splits again into five smaller branches (58). The branches go to the eyes, nostrils, tongue, lips and ears; one nāḍī, coming from the back, is called ākuñcanakārī (59).⁷⁹ A nāḍī, coming from the shoulder region, goes to the hand and splits into five branches; this one too is called ākuñcanakārī (60). A nāḍī running downwards from the back splits into five branches for the toes and is called prasāraṇakārī (61).⁸⁰ The ninth limb of the tortoise is called liṅganāḍī; its two branches convey urine and semen (62). The tortoise lies in a transverse position in the umbilical region, its head pointing to the left and its tail to the right; its left legs point upwards, the right legs downwards (63). Two nāḍīs are present in its head, two in its tail, and five in each of its legs (64). Its mouth parts face upwards in women, downwards in men (71). For this reason a physician should examine the pulse of the right hand in males, that of the left hand in females (72).

NĀḌĪNĀNAŚIKṢĀ by Kālīprasanna Vidyaratna Bhaṭṭācārya,⁸¹ a modern work.
NĀḌĪNĀNAŚIKṢĀ by Haralāla Gupta.⁸²

NĀḌĪNĀNATARANĠINĪ, a treatise on the pulse in 102 verses by Raghunāthaprasāda.⁸³

This work is in the form of a dialogue between a woman called Lolākṣī, daughter of a Gandharva called Pampayya who lived in Bilagrāma, and a physician who answers her questions on diagnostics by means of the pulse (5–8; 101–102).

The usual subjects are covered. Many verses are taken from the monographs on the pulse attributed to Kaṇāda and Rāvaṇa or are very similar to verses found there, although the author does not disclose his sources except mentioning Parāśara by name

(2).

The deities presiding over the pulses of vāyu, pitta and kapha are Brahmā, Śiva and Viṣṇu (10), or, according to another view, Vāyu, Sūrya and Candra (11). The difference in examining the pulse in male and female patients (the pulse of the right hand in males and that of the left in females) is mentioned and explained as due to the head of the kūrma (tortoise)⁸⁴ being directed upwards in females and downwards in males (16–18).⁸⁵ The pulse in diseases is hardly described (76–81), whereas the frequency of the pulse, dependent on the age of the patient, is elaborately dealt with (82–90).⁸⁶ The pulse is explained as brought about by rhythmic contractions of the heart which, with vāta as an intermediary, make the blood move through the vessels (91–92).

Raghunāthaprasāda was the son of Sītārāma and Lakṣmī and a pupil of Śrīnivāsa.⁸⁷ Sītārāma was the eldest of the three sons of Tāpīrāma, son of the physician Govardhana who descended from Bālāśarma, a brāhmaṇa of Kānyakubja lineage.⁸⁸

The *Nāḍījñānatarāṅgiṇī* is a modern work as appears from its description of the contraction of the heart as the origin of the pulse.⁸⁹

NĀḌĪJÑĀNAVIDHI⁹⁰ by Raghunātha Paṇḍita⁹¹ is a short treatise in twenty-two verses on the characteristics of the pulse in excitement of each of the three doṣas, in saṃnipāta, and in a short series of disorders. The author also describes the views of Caraka on the pulse in disorders of one doṣa, two doṣas, and saṃnipāta.⁹²

NĀḌĪJÑĀNAVĪRĪṆAYA.⁹³

NĀḌĪKARATNADARPAṆA.⁹⁴

NĀḌĪLAKṢAṆA.⁹⁵

NĀḌĪLAKṢAṆA, ṢAḌVIDHA.⁹⁶

NĀḌĪMŪTRAMALANETRAPARĪKṢĀ.⁹⁷

NĀḌĪMŪTRANETRAPARĪKṢĀ.⁹⁸

NĀḌĪMŪTRAPARĪKṢĀ.⁹⁹

NĀḌĪNAKṢATRAMĀLĀ.¹⁰⁰ The nāḍī¹⁰¹ situated at the root of the thumb has an extension of three fingers (aṅgula) and the size of a barleycorn; it is connected with all parts of the body (1). The course of kapha in this wonderful nāḍī can be found between those of vāta and pitta (2). The course of pitta may be detected by means of the forefinger, that of kapha by means of the middle finger, and that of vāta by means of the ring finger (3). Taking the root (of the thumb) as the point of reference, the nearest pulse is that of pitta, followed by those of kapha and vāta (4). A physician should determine the nature of the vāta pulse first, subsequently that of kapha and pitta (5).

The characteristics of the normal pulses of pitta, kapha and vāta (6–7). Characteristics of abnormal pulses of vāta, kapha and pitta (8). An abnormal condition (vakragatī) of the three pulses indicates disease, a normal (sama) condition health (9). The pulse of kapha is called after Brahmā, that of pitta after Viṣṇu, that of vāta after Īśvara (= Śiva); this is the opinion of Dhanvantari (10). The characteristics of the pulse indicating a disorder of vāta and pitta (11), pitta and vāta (12),¹⁰² kapha and pitta (13), pitta and kapha (14), kapha and vāta (15), vāta and kapha (16). The characteristics of the

pulse in disorders caused by vāta (17), kapha (18) and pitta (19). The characteristics of a particular type of irregular pulse (20).¹⁰³ The characteristics of a particular abnormal pulse indicating thirty-two disorders (doṣa) (21).¹⁰⁴ The characteristics of the pulse in a disorder called sūtikāvāyu (22).¹⁰⁵ Pulses indicating an (external) fever, internal fever, and a fever that has reached the bones (23). Characteristics of the pulse indicating a fatal outcome (24). The importance of determining the five main characteristics of the pulse (25–26).¹⁰⁶ Characteristics of the pulse indicating a favourable prognosis (27).

The author of the commentary, called *Nāḍīnirūpaṇā*, was Kṛṣṇa Sūri, son of Gopālācāryasūri, of Sātulūri lineage.¹⁰⁷

Authorities quoted in the commentary are Amara and Viśva.

NĀḌĪNIDĀNA or *Nāḍīnirṇaya*, a work in twenty-seven stanzas attributed to the Aśvins.¹⁰⁸

NĀḌĪNIRṆAYA.¹⁰⁹

NĀḌĪNIRŪPAṆA.¹¹⁰

NĀḌĪPARĪJÑĀNA, compiled by Śrīnivāsācārya Ayyavāralu.¹¹¹

NĀḌĪPARĪKṢĀ by Agniveśa.¹¹²

NĀḌĪPARĪKṢĀ by Avadhūta.¹¹³

NĀḌĪPARĪKṢĀ attributed to Dattātreyā.¹¹⁴

NĀḌĪPARĪKṢĀ by Dhunḍhirāja.¹¹⁵

NĀḌĪPARĪKṢĀ by Gaṅgādhara.¹¹⁶

NĀḌĪPARĪKṢĀ by Govinda.¹¹⁷

NĀḌĪPARĪKṢĀ by Kaṇāda.¹¹⁸

NĀḌĪPARĪKṢĀ by Mandhara.¹¹⁹

NĀḌĪPARĪKṢĀ by Mārkaṇḍeya.¹²⁰

NĀḌĪPARĪKṢĀ by Nañjarāja.¹²¹

NĀḌĪPARĪKṢĀ by Pūjyapāda.¹²²

NĀḌĪPARĪKṢĀ by Rāmacandra Somayājīn, son of Agnicit Sūryadāsa of Naimiṣāraṇya.¹²³

NĀḌĪPARĪKṢĀ ascribed to Rāvaṇa,¹²⁴ a treatise on the pulse in ninety-six verses.

The maṅgala is addressed to Indirā, i.e., Lakṣmī. The second verse refers to aṣṭasthānaparīkṣā.

The subjects dealt with are: the jīvanāḍī (i.e., the radial artery), called thus by Nandī(n),¹²⁵ located in the forearm and connected with all parts of the body; this jīvanāḍī, when examined at the base of the thumb, reveals all types of disturbances of the doṣas (3–5); the correct way of examining the pulse in men and women at the wrist and at the ankle (6–10); the three pulses of the doṣas in relation to the three fingers of the examiner, their characteristics when the doṣas are in balance and when they are excited (11–14); qualities of the pulses of the normal and the excited doṣas (15–19); the pulse in a healthy person and in incurable diseases (20–23); the pulse in

various disorders (24–38); the qualities of the pulse when the doṣas are staying in their respective seats, when increased, decreased, or disturbed in various ways (39–45); the pulse in various disorders (46–67); pulses indicating incurability or death within a specified period of time (68–90); characteristics of a dying person (91–93); the number of pulsations compatible with life (94); the pulse in a fever which has reached the innermost parts of the body (95); the duty of a physician to withhold treatment from a patient after recognizing the approach of death (96).

Rāvaṇa's treatise on the pulse is less systematically arranged than that of Kaṇāda. It is probably quoted by Āḍhamalla and Kāśīrāma.¹²⁶ Rāvaṇa is mentioned in Kapilamiśra's *Nāḍīprabodhana*.

A modern Sanskrit commentary on the work, called *Vivṛti*, was written by Satyadeva Vāsiṣṭha.¹²⁷

Authors and works quoted or referred to in this commentary are: Amara (38; 87), *Añjananidāna* (49; 63), *Aṣṭāṅgaḥṛdayasaṃhitā* (26), *Āyurvedaśāstra* (10), *Basavarājīya* (5; 8; 17–18; 20; 21; 23; 29; 31–32; 74; 86; 87), *Bhagavadgītā* (9; 10), Bhāskara's *Siddhāntaśiromaṇi* (10), *Bhāvaprakāśa* (46), Caraka (often), Kaṇāda (often), *Līṅgapurāṇa* (4), *Madhukoṣa* (64), *Nāḍīdarpaṇa* (34), *Nāḍīprakāśa* (83; 86), *Nidāna* (31; 57), *Nīlakaṇṭha's Prāsnatantra* (34),¹²⁸ *Patañjali* (34), *Rasavaiśeṣika* (24–25), *Ṛgveda* (7; 10), *Śatapathabrāhmaṇa* (8), *Suśruta* (often), *Videha* (64), *Yajurveda* (10; 92), *Yāska* (34), and *Yogaratanākara* (74; 75; 77; 84–85; 87–88).

The two main teachers of the author were Nāthūrāmaudgalya, son of Gokula, pupil of Gaṇanātha, and Tilakaramaśarman, son of Sukharāma, pupil of Arjunamiśra.¹²⁹

The following elements of Rāvaṇa's *Nāḍīparīkṣā* are absent from Kaṇāda's *Nāḍīvijñāna*:¹³⁰ the term *jīvanādī* and its attribution to Nandi(n); the reference to *aṣṭasthānaparīkṣā*; the differences in the examination of the pulses in men and women. The series of diseases mentioned together with the characteristics of the pulse observed in them is longer than in Kaṇāda's work.¹³¹

Nothing is known about the real author of the text.¹³²

The quotations from Rāvaṇa's *Nāḍīparīkṣā* by Āḍhamalla, if from this text and not from a floating tradition,¹³³ suggest a date anterior to the fourteenth century.¹³⁴ The reference to *aṣṭasthānaparīkṣā* seems to contradict such an early date since this subject is not mentioned in medical treatises until the beginning of the sixteenth century.¹³⁵

NĀḌĪPARĪKṢĀ by Śrīvātasya rājabhiṣak.¹³⁶

NĀḌĪPARĪKṢĀ compiled by Vipinavihārīn Gupta.¹³⁷

NĀḌĪPARĪKṢĀ by Yogīśvara.¹³⁸

NĀḌĪPARĪKṢĀ, anonymous.¹³⁹

NĀḌĪPARĪKṢĀDĪCĪKITSĀKATHANA by Ratnapāṇīśarman, son of Gaṅgolī Saṃjīveśvaraśarman, patronized by Chattrasimha of Mithilā. This work is a treatise on the examination of the pulse and on therapy in 552 verses, arranged in five chapters (*vilā-*

sa). The order of the diseases in this treatise is odd; it ends with a *rasaprakaraṇakīrtana*. It has been composed after A.D. 1550.¹⁴⁰

NĀḌĪPARĪKṢĀJÑĀNĀDĪ.¹⁴¹

NĀḌĪPARĪKṢĀLAKṢAṆA.¹⁴²

NĀḌĪPRABODHA by Rāmacandra Vājapeyin,¹⁴³ son of Sūryadāsa and pupil of Śrībhārati, a treatise in 158 verses, composed in A.D. 1446.¹⁴⁴

NĀḌĪPRABODHAKA by Kavirāja Kṛpāmiśra or Kṛṣṇamiśra Pañcendra.¹⁴⁵

NĀḌĪPRAKARAṆA by Kaṇāda.¹⁴⁶

NĀḌĪPRAKARAṆA by Śivadāsa, in thirty-eight stanzas.¹⁴⁷

NĀḌĪPRAKARAṆA from the *Vaidyabhūṣaṇa Bhīmarāva*.¹⁴⁸

NĀḌĪPRAKARAṆA or *Nāḍīparīkṣā*, anonymous.¹⁴⁹

NĀḌĪPRAKĀŚA by Dattarāma.¹⁵⁰

NĀḌĪPRAKĀŚA from the *Gautamīyatantra*.¹⁵¹

NĀḌĪPRAKĀŚA by Govinda.¹⁵²

NĀḌĪPRAKĀŚA by Kaṇāda.¹⁵³

NĀḌĪPRAKĀŚA, compiled by Pītāmbarasena.¹⁵⁴

NĀḌĪPRAKĀŚA by Rāmarāja,¹⁵⁵ son of Ratnadeva.¹⁵⁶

NĀḌĪPRAKĀŚA by Śaṃkarasena¹⁵⁷ Kavirāja, a work in three¹⁵⁸ or four¹⁵⁹ chapters (*uddiyota*), based on Kaṇāda's *Nāḍīvijñāna*. It quotes a large part of Kaṇāda's verses,¹⁶⁰ frequently in a changed order, and comments on them, thereby comparing Kaṇāda's views with those of other authorities. Śaṃkarasena enlarges on some subjects, in particular the seasons and the causes of excitement of the doṣas. Chapter three contains sections on the examination of the menstrual discharge, semen, urine, nose, eyes, and tongue, which are subjects not dealt with in Kaṇāda's work. Chapter three ends with the statement that the art of feeling the pulse can be learnt only by concentrating one's mind in the same way as in yoga. Chapter four is, apart from the first few verses, omitted in edition b and replaced by an exposition on yoga and breathing. The full Sanskrit text of this chapter and its translation are found in edition c; it consists of an exposition on prognostic signs derived from characteristics of the breathing of the patient.¹⁶¹

Sources quoted are *Jāmalā* (chapter four), the *Prayogacintāmaṇi*¹⁶² (88: on the examination of the urine and other types of *parīkṣā*), (the *Nāḍīprakāśa* of) Rāmarāja (20; 85), and *Suśruta* (50: on the excitement of the doṣas and blood; 86: on the menstrual discharge; 87: on semen). The *Dattatreyasaṃhitā* was also among Śaṃkarasena's sources.¹⁶³

Śaṃkarasena's *Nāḍīprakāśa* is quoted in Jivānandavidyāsāgara's commentary on Kaṇāda's *Nāḍīvijñāna*. Śaṃkarasena is referred to in Kapilamiśra's *Nāḍīprabodhana*.¹⁶⁴ The *Nāḍīprakāśa* quoted in Aghoranātha's commentary on his *Bhīṣaksarvasva* and Lakṣmīrāma's commentary on the *Siddhabheṣajamaṇimālā* is Śaṃkarasena's work. An unspecified *Nāḍīprakāśa* is cited in Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍīparīkṣā*.

Śaṅkarasena belonged to the medical caste called Ambaśṭha¹⁶⁵ and was the son of Śrīpati, a descendant of Duhisena.¹⁶⁶ He lived in Bengal¹⁶⁷ and wrote his work for his friend, Kavirāj Śānanda.¹⁶⁸

The *Nāḍiprakāśa* was composed towards the end of the nineteenth or in the beginning of the twentieth century.¹⁶⁹

NĀḌISAMUCCAYA.¹⁷⁰

NĀḌISĀSTRA.¹⁷¹

NĀḌISĀSTRASAMGRAHA.¹⁷²

NĀḌĪTANTRA.¹⁷³

NĀḌĪTANTRA by Hārīta.¹⁷⁴

NĀḌĪTANTRA, ŚAḌVIDHA-.¹⁷⁵

NĀḌĪTANTRAVIDHI, ascribed to Dattātreyā.¹⁷⁶

NĀḌĪTARAṆGIṆĪ.¹⁷⁷

NĀḌĪTATTVAVIDHI, ascribed to Dattātreyā.¹⁷⁸

NĀḌĪVICĀRA.¹⁷⁹

NĀḌĪVICĀRAROGAGAṆANĀ.¹⁸⁰

NĀḌĪVIDHĀNA.¹⁸¹

NĀḌĪVIJÑĀNA, anonymous.¹⁸²

NĀḌĪVIJÑĀNA by Dvārakānātha Bhaṭṭācārya.¹⁸³

NĀḌĪVIJÑĀNA by Govindarāmasena, son of Kṛṣṇavallabhasena and grandson of Śrīpatīsena.¹⁸⁴

NĀḌĪVIJÑĀNA, ascribed to Kaṇāda,¹⁸⁵ is a monograph on the examination of the pulse in 116 verses.¹⁸⁶

The maṅgala is addressed to Śambhu, i.e., Śiva, whose five mouths revealed the five Vedas, i.e., Ṛg-, Yajur-, Sāma-, Atharva-, and Āyurveda. Maheśa, i.e., Śiva, transmitted his knowledge of the Vaidyaka, i.e., Āyurveda, to Dhātār, i.e., Brahmā or Prajāpati; Dhātār gave it to Turāśāh, i.e., Indra, and Indra in his turn to Kaṇāda.

The nāḍīs of the human body are said to be thirty-five millions in number and to have the umbilical region as their place of origin; 72,000 among them transport the perceptions of the five senses and 700 the fluid derived from the food (annarasa); twenty-four nāḍīs only can distinctly be felt. The nāḍī in the right hand or foot is the one to be examined in particular.¹⁸⁷ A tortoise (kūrma), thought to be located in the umbilical region with its mouth directed to the left, its tail to the right, its left legs upwards and its right legs downwards, is the origin of the twenty-four nāḍīs accessible to examination; two nāḍīs proceed from its head, two from its tail, and five from each of its legs (3–9).

The right way to examine the radial pulse is described and the circumstances which are suitable or unsuitable to the procedure (11–13). The synonyms of the term nāḍī are enumerated (15) and the way to distinguish the pulse of the three doṣas when in balance or excited is described (16–18). The characteristics of the pulse in a healthy person are given, and those of a normal pulse during the morning, afternoon, evening and night (19–20). The verses which follow are on the qualities of the pulse in disorders

of one, two, and all three doṣas (21–30), on the pulses which indicate incurability or death within a specified period of time (31–49), curability in cases seemingly incurable (50–61), on the relation between the pulse and particular articles of diet, as well as foods with a particular taste (62–78). The treatise ends with a long series of stanzas on the pulse in various diseases (80–116).¹⁸⁸

Verses from Kaṇāda's treatise form part of Dattarāma's *Nāḍīdarpaṇa* and the section on nāḍīparīkṣā of Śrīkanthasūri's *Hitopadeśa*. Kaṇāda and his *Nāḍīvijñāna* are quoted in Guṇrājśarmamiśra's *Viśikhānupraveśavijñāna*. Kaṇāda (i.e., the *Nāḍīvijñāna*) is often cited in Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍīparīkṣā*. A *Nāḍīvijñāna* is quoted in Aghoranātha's commentary on his *Bhīṣaksarvasva* and Yogendranātha's *Āyurvijñānaratnākara*.

Commentaries on Kaṇāda's *Nāḍīvijñāna* were written by Govindarāma,¹⁸⁹ Hariharanātha Śāstrin,¹⁹⁰ Śaṅkarasena,¹⁹¹ and Jivānandavidyāsāgara.¹⁹²

Authorities quoted in Jivānanda's commentary are:¹⁹³ Amara (6), *Bhāvaprakāśa* (13; 70), Caraka, Dattātreyā (7; 8), *Gāruḍasvarodaya* (3), Govindarāma (81; 97),¹⁹⁴ Haima (89), Medinī (6; 80; 82; 100), *Nidāna* (91),¹⁹⁵ *Pārāśarīya* (3), *Rājanighaṇṭu* (63), Rāmarāja (19; 23; 113),¹⁹⁶ Śaṅkarasena (18; 20; 26; 30; 81; 82; 83; 84; 93; 102; 110; 113),¹⁹⁷ *Śivasamhitā* (3),¹⁹⁸ *Sūksmasvarodaya* (3),¹⁹⁹ Suśruta, Vāgbhata (70; 78), and *Viśva* (5).²⁰⁰

Jivānanda's commentary records a large number of variant readings.

No particulars are known Kaṇāda and the date of his work.²⁰¹

NĀḌĪVIJÑĀNĪYA.²⁰²

NĀḌYĀDIPARĪKṢĀ by Rāmacandra Somayājīn.²⁰³ This work is probably identical with Rāmacandra Vājapeyin's *Nāḍīprabodha*.

NĀḌYUTPATTI by Śrīrāma.²⁰⁴

TRIDOṢANĀḌĪVIVARAṆA.²⁰⁵

Chapter 3

Various authors

AGHORA: *Vidyāvalī* or *Aghoravidyāvalī*, a work in āryā metre, which consists of sixteen chapters (adhikāra), and deals with several branches of medicine.¹

AGHOŠAMAṆI: *Mūlakacandraprakāśa*.²

AGNIVEŚA's *Añjananidāna*³ deals exclusively with nidāna.⁴

The work consists of 235⁵ verses, mostly ślokaḥ;⁶ the majority of these were composed by the author. After the introductory stanza, the causes of excitement of the doṣas, the signs of these when excited, and some other general subjects are dealt with (2–9). Verses 10–233 are about the nidāna of the various diseases. The influence of the *Mādhavanidāna* is distinctly traceable in the *Añjananidāna*,⁷ but many divergences can be noticed. The arrangement of the diseases resembles that of *Mādhava* most from jvara up to śoṭha (10–164). Subsequently, the number of differences increases. Since the *Añjanidāna* is much more concise than the *Rogavinīścaya*, some of the nosological entities described in the latter work are omitted.⁸

Sources are not referred to in the *Añjananidāna*.

The *Añjananidāna* is quoted in Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nāḍīparīkṣā*.

Compared with the *Mādhavanidāna*, the following additions are conspicuous: quotidian fever is said to pervade the body during fifty ghṛtīs⁹ (26); three viparyaya types of irregular fever are distinguished (26); a type of fever arising from kṣveda¹⁰ is described (30); laghu and guru types of fever are mentioned (32–33); saṃgrahaṇī is distinguished from grahaṇī (47); bhasmaka¹¹ is added to the varieties of ajīrṇa (57); vranāyāma¹² is added to the series of vāta diseases (110); medoroga is supplemented by svabhāvadurbalatā¹³ (151); vṛddhi is broken up into kuraṇṭaka¹⁴ and vardhma¹⁵ (165–168); masūrīkā is said to occur exclusively in children (209); dhvajabhaṇa, i.e., impotence (209), and other disorders of male sexual functioning are described (220–222).

Commentaries on the *Añjananidāna* are reported to have been written by Bālaśāstrī Garde,¹⁶ Dattarām Caube,¹⁷ Gumana Rāma,¹⁸ Jayakṛṣṇamiśra,¹⁹ and Tripāṭhiśaṃkara.²⁰

Agniveśa is mentioned as the author in the first and the last verses. The real author remains unknown.²¹ Several nosological details are in favour of assigning the work to a period later than the eleventh or twelfth century. The only evidence as to the lower limit is provided by the date of some MSS (1752,²² 1793,²³ and 1794).²⁴

AKALĀṆKASVĀMIN: *Vidyāvinoda*. This work by a Jain author refers to Bhāskara, Dharmakīrti, Pūjyapāda, and Virasena.²⁵

ANANTAKUMĀRA's *Yogarātnasamuccaya*²⁶ is a very extensive treatise, mainly dealing with therapy, and containing extracts from a large number of earlier authors and works quoted by name.

The work is written in verse, interspersed with prose passages, and contains about 10,000 stanzas, arranged in thirty chapters (adhikāra), the subjects of which are: (1) the doṣas (1–61); (2) pañcakarman, i.e., sneha (1–19), sveda (1–22), vamaṇa and virecana (1–73), basti (1–123), and nasya (1–27); (3) dhūma (1–7), gaṇḍūṣa and kavala (8–12), mūrdhataila (12–23); (4) raktamokṣaṇa (1–78); (5) kṣāra and agnikarman (1–18); (6) bhojana, viruddhāṇṇa, pravivṛṣa (1–129); (7) snehapāka (1–134); (8) dravya (1–1262); (9) jvarādirogacikitsā, on jvara (1–595), raktapitta (596–673), asṛgdara (674–720), and asthisrāva (721–761); (10) kāsādirogacikitsā, on kāsa, śvāsa, and hikkā (1–287); (11) rājayakṣmādirogacikitsā, on rājayakṣman (1–108), svarasāda (108–146),²⁷ arocaka (147–193), and praseka (194–204); (12) chardiyādirogacikitsā, on chardi (1–72), hṛdroga (72–156), tṛṣṇā (157–229), mada, murchā and saṃnyāsa (230–274); (13) on arśas and udāvarta (1–282); (14) atisārādirogacikitsā, on atisāra (1–224) and grahaṇī, together with agnimāndya, ajīrṇa, alasaka and viṣūcikā (225–494); (15) on mūtrāghāta and mūtrakṣcchra (1–198), prameha, śarkarā and āsmarī (199–327), somaroga and mūtrāśīṣāra (328–339); (16) vidradhyādirogacikitsā, on vidradhi (1–89), vṛddhi (90–168), gulma (169–499), śūla (500–580), ādhmāna, ānāha, and some related disorders (581–588); (17) jalakūrmādirogacikitsā, on jalakūrma (589–632), plīhan (633–683), and udara (1–152); (18) on pāṇḍuroga (1–71), kāmālā, kumbhakāmālā and halimaka (72–134), śopha (135–243), visarpa (244–409), masūrīkā (410–468), visphoṭa (469–487), śītapitta and amlapitta (488–507), and kṣudramasūrīkā (508–514); (19) on kuṣṭha (1–241), śvitra (242–282), and krimi (283–355); (20) vātādirogacikitsā, on vātavyādhi (1–381), vātaśoṇita (382–530), sṭhauḷya (531–549), kārśya (550–556), and nidrā (557–571); (21) vandhyādirogacikitsā, on vandhyā (1–35), garbhiṇī (36–320),²⁸ and bālāroga (321–576); (22) on warding off (pratīśedha) bālagrahas (1–282); (23) on warding off bhūtonmāda (1–29), unmāda (30–91), and apasmāra (92–151); (24) netrarogādicikitsā, on netraroga (1–515), kaṇaroga (516–594), nāsāroga (595–642), and mukharoga (643–851); (25) śīrorogacikitsā (1–166); (26) vranacikitsā, on vrana (1–219), bhagna (220–270), and dagdha (271–280); (27) bhagandarādicikitsā, on bhagandara (1–39), granthi and arbuda (1–37), ślīpada (38–58), apacī (59–98), and nāḍī (99–112); (28) kṣudrarogacikitsā (1–89); guhyarogacikitsā, on upadamaśa, yonyarśas, piṭākā, niruddhamāṇi (1–37), yonivyāpad and related disorders (38–74); (29) viṣacikitsā (1–410); (30) rasāyana (1–186) and vājīkaraṇa (187–255).

Though the author's main concern is therapeutics, the subject of nidāna is not neglected in this work. The treatment of most diseases is preceded by verses on their aetiology and symptomatology. Religious and astrological elements are quite common in Anantakumāra's therapy,²⁹ but, broadly speaking, his work can be characterized as belonging to the mainstream of āyurvedic tradition since rasaśauśadhas are nearly absent. Mercury is only rarely prescribed and opium seems to be unknown to the author.

The arrangement of the diseases differs entirely from the order introduced by Mādhava and has obviously been influenced by Vāgbhaṭa.

The *Yogarātnasamuccaya* is for the greater part a compilation from the works of predecessors, but verses that were probably composed by the author are not rare; versified passages from sources in prose are also found and even indicated as such.³⁰ Numerous borrowings are said to derive from some unspecified treatise (*tantrāntara*).

The sources quoted by name are:³¹ Acyuta,³² Āgama,³³ Āgastya,³⁴ Agniveśa, Āgniveśya, Ālambāyana,³⁵ Amarakośa,³⁶ Amitaprabhīya,³⁷ Amṛtadhā,³⁸ Amṛtamālā,³⁹ Amṛtāñjali,⁴⁰ Amṛtaprabhīya,⁴¹ Ārogyasāstra,⁴² Āryāsamuccaya,⁴³ Āśvina-saṃhitā,⁴⁴ Āśvineya,⁴⁵ Āśvinīya,⁴⁶ Aurabhra,⁴⁷ Bāhusāla,⁴⁸ Bāhusaṅghā,⁴⁹ Bārhaspatya,⁵⁰ Bhadrāsana,⁵¹ Bhadravarman,⁵² Bhālukīya,⁵³ Bhāradvājīya,⁵⁴ Bhara-ta,⁵⁵ Bhārgava,⁵⁶ Bhavaka,⁵⁷ Bhaviṣyapurāṇa,⁵⁸ Bhaviṣyottarapurāṇa,⁵⁹ Bhela,⁶⁰ Bhiṣaṇmuṣṭi,⁶¹ Bhoja,⁶² Bhojarāja,⁶³ Bhojottara,⁶⁴ Bimbasāra,⁶⁵ Bindusāra,⁶⁶ Brahmācārīn,⁶⁷ Brahmanḍapurāṇa,⁶⁸ Brāhmīyasūtra,⁶⁹ Brhadhbhoja,⁷⁰ Cākṣuṣa,⁷¹ Candrā,⁷² Candrāṭa,⁷³ Caraka,⁷⁴ Carakanyāsa,⁷⁵ Catuṣṣaṣṭi,⁷⁶ Cikitsākalikā,⁷⁷ Cikitsā-rṇava,⁷⁸ Daśemāni,⁷⁹ Devalīya,⁸⁰ Dīpanīya,⁸¹ Dravyakalpa,⁸² Dravyāvali,⁸³ Eka-dra-vya,⁸⁴ Eraṇḍakalpa,⁸⁵ Gandhayukti,⁸⁶ Gaṇḍīrīṣṭahārītakīvyākhyāna,⁸⁷ Gaurītantra,⁸⁸ Hārīscandra,⁸⁹ Hārīta,⁹⁰ Hārītīya,⁹¹ Hirāṇyākṣīya,⁹² Indu,⁹³ Iśānyāyoga,⁹⁴ Jānu-ka,⁹⁵ Jarjaṭa,⁹⁶ Jātukarṇa,⁹⁷ Jīmūtasena,⁹⁸ Jitasena,⁹⁹ Jivaka,¹⁰⁰ Jivakī,¹⁰¹ Kalyāṇa-(ka)-,¹⁰² Kāñcīpuravāsin,¹⁰³ Kāñkāyana,¹⁰⁴ Kārikā,¹⁰⁵ Kāśyapīya,¹⁰⁶ Kātyāyānīya,¹⁰⁷ Kharanāda,¹⁰⁸ Kharanādīya,¹⁰⁹ Kṛṣṇātreya,¹¹⁰ Kṣārapāṇi,¹¹¹ Kṣārapāṇīya,¹¹² Kṣu-drabhoja,¹¹³ Kumārasaṃhitā,¹¹⁴ Linārthadyotani,¹¹⁵ Mahābhārata,¹¹⁶ Mahāpāṭhaśu-ddhi,¹¹⁷ Mahāyāna,¹¹⁸ Mahendrakalpa,¹¹⁹ Mahodadhi,¹²⁰ Manoramā,¹²¹ Manusmṛti,¹²² Mayamata,¹²³ Nāgārjuna,¹²⁴ Nāgārjunīya,¹²⁵ Nāmanīta,¹²⁶ Nārādīya,¹²⁷ Nārāyaṇī-ya,¹²⁸ Pālākāpya,¹²⁹ Pārāśarya,¹³⁰ Pāṭhaśuddhi,¹³¹ Prayogahṛdaya,¹³² Prayogakośa,¹³³ Prayogaratnākara,¹³⁴ Prayogārṇava,¹³⁵ Prayogasamgraha,¹³⁶ Prayogasāra,¹³⁷ Prayogasiddhi,¹³⁸ Rājāmārtapāṇīya,¹³⁹ Rājāvaidehīya,¹⁴⁰ Ratnajitasena,¹⁴¹ Ratnāvali,¹⁴² Śacīmata,¹⁴³ Sahasrayoga,¹⁴⁴ Sahasrayogī,¹⁴⁵ Sahasrayogīvyākhyā,¹⁴⁶ Śākyabhikṣu,¹⁴⁷ Śālihotra,¹⁴⁸ Saṃgraha,¹⁴⁹ Sārāṇava,¹⁵⁰ Sārasaṃkṣepa,¹⁵¹ Sārāvali,¹⁵² Śarvatrāta,¹⁵³ Sarvatrāta,¹⁵⁴ Śāstrārṇava,¹⁵⁵ Sauśruta,¹⁵⁶ Siddhasāra,¹⁵⁷ Siddhayoga,¹⁵⁸ Siddhayogasam-muccaya,¹⁵⁹ Siddhayogasāra,¹⁶⁰ Śikhāyoga,¹⁶¹ Śivaratnacūḍāmaṇi,¹⁶² Ślokālaṃkā-ra,¹⁶³ Śrīdharamuṣṭi,¹⁶⁴ Sūdasāstra,¹⁶⁵ Sūdarī,¹⁶⁶ Suśruta,¹⁶⁷ Uttaraṅgīya,¹⁶⁸ Vāha-ṭa,¹⁶⁹ Vaidehīya,¹⁷⁰ Vaitarāṇa,¹⁷¹ Vararuci,¹⁷² Vārtika,¹⁷³ Vṛddhahāriscandra,¹⁷⁴ Vṛ-ddhahārīta,¹⁷⁵ Vṛddhakāśyapa,¹⁷⁶ Vṛddhakharanāda,¹⁷⁷ Vṛddhaśravas,¹⁷⁸ Vṛddhavā-haṭa,¹⁷⁹ Vṛddhavideha,¹⁸⁰ Vyasanagupta,¹⁸¹ Yoga-¹⁸² Yogakaraṇḍa,¹⁸³ Yogamālā,¹⁸⁴ Yogāmṛta,¹⁸⁵ Yogarāṣi,¹⁸⁶ Yogaratnā,¹⁸⁷ Yogasāra,¹⁸⁸ Yogasārasamuccaya,¹⁸⁹ Yoga-śataka,¹⁹⁰ Yogasiddhi,¹⁹¹ Yogāśīti,¹⁹² Yogasudhākara,¹⁹³ and Yogayukti.¹⁹⁴

Mentioned in the text of the treatise are: Amṛtamālā,¹⁸⁵ Bhela,¹⁸⁶ Brahmanḍa(purā-ṇa), Indu,¹⁸⁷ Jātukarṇa,¹⁸⁸ Kṛṣṇātreya,¹⁸⁹ Manu, Ravigupta,¹⁹⁰ Suśruta,¹⁹¹ Vāhaṭa,¹⁹² Videhādhipa,¹⁹³ and Yājñavalkya.¹⁹⁴

The *Yogarātnasamuccaya* is quoted, anonymously, in the *Kairālī* commentary on the *Aṣṭāṅgahṛdayasamhitā*.¹⁹⁵

Worthy of attention are the following features in the field of nosography: the mention of the disease called asthisrāva (9.721–761); praseka (11.194–204) as a

separate disease; the use of the synonyms vāhikā (14.65, 70, 72), nirvāhikā (14.61 and 77), niścāra (14.62), niścāraka (14.78 and 89), and bimbisī (14.64, 74, 79) for pravāhikā; the disease jalakūrma (17.589–632), probably identical with jalodara; the description of six types of pāṇḍuroga (the sixth arising from loṣṭavibhedana), quoted from a text called *Mahāyāna* (18.3); the elaborate description of masūrīkā, on which subject the *Bhāradvājīya* is quoted (18.410–418), which states that it is of nine types, but of eight only according to some of the authorities; in a citation from Aurabhra (18.419–427) eight types are described: masūrīkā, sarsapikā, ajakā, kodrava, kaṅgu, visphoṭaka, pākī, and visarpi; remarkable is a formula against masūrīkā said to be pascātyajanapadaprasiddha, i.e., well known in western countries; an epidemic form of masūrīkā is also referred to (18.467); the description of a disease, distinct from masūrīkā, called kṣudramasūrīkā or matsyanāsā (18.508–514), quoted from an authority named Bāhusaṅghā; śītapitta is regarded as identical with amlapitta (18.488–489); makkalla is called markala (21.233, 236, 238); the description of a disease called vaṣṭiroga, erroneously diagnosed by others as aṣṭhlikā, granthi or raktagulma (21.302–312); the description of an unperforated anus in a newborn child (21.330: advāraka guda) from a work called *Prayogasiddhi*; an elaborate description of the disease called kṣīrālāsaka (21.387–396ab) and its treatment (21.396cd–407); the religious treatment of fever in children (21.421–432); a children's disease called mukhadūṣikā, characterized by the appearance of pustules on the face (21.496), quoted from the *Prayogasiddhi* again; a children's disease called nicūrīkā, characterized by the repeated appearance and quick disappearance of blisters (21.499); a children's disease called viṣavajra, characterized by burning and by itching pustules (21.500); a children's disease called tuṇḍa, characterized by an inflamed navel (21.503–504); the description of a disease called kuṇḍāla, three varieties of which are distinguished (21.507–517); the description of several series of bālagrahas and the measures to ward them off, quoted from the *Nārāyaṇīyabālatantra*,¹⁹⁹ Jivaka's *Bālatantra*,²⁰⁰ and an unspecified work (*tantrāntara*);²⁰¹ twenty-four diseases of the eyelids are enumerated and described (24, prose between 55 and 56), nine diseases of the junctures (sandhi) of the eyes (24, prose between 90 and 91), thirteen diseases of the white portion (śuklabhāga) of the eyes (24, prose between 99 and 100), five diseases of the black portion (24, prose between 135 and 136; 24.136–150), twenty-seven diseases of the dṛṣṭi (24, prose between 244 and 245), sixteen diseases affecting the whole eye (24, prose between 395 and 396), twenty-five diseases of the ears (24, prose between 515 and 516; 24.516; prose between 24.516 and 517), eighteen diseases of the nose (24.595–602 and prose passages), eleven diseases of the lips (oṣṭharoga; 24, prose between 645ab and cd), ten diseases of the teeth (dantaroga; 24, prose between 651 and 652), thirteen diseases of the roots of the teeth (dantamūlaroga; 24, prose between 689 and 690), six diseases of the tongue (jihvāroga; 24, prose between 742 and 743), eight diseases of the palate (24, prose between 763 and 764), eighteen diseases of the throat (kaṇṭharoga; 24, prose between 772 and 773), eight diseases affecting the whole oral cavity (sarvamukhagataroga; 24, prose between 800ab and cd), and nineteen diseases of the head (śīroroga; 25, prose at the beginning of the chapter).²⁰²

Noteworthy names of medicinal plants are: ākūlabṛhaṭī (8.549), alakṣmī (8.575),

amlabṛhaṭī (8.549),²⁰³ candrī (29.395),²⁰⁴ dhurdhūra (26.122),²⁰⁵ galocikā or gu-lojikā (8.538),²⁰⁶ gandhalakṣmī (8.574),²⁰⁷ gauḍī (8.585),²⁰⁸ ghanastanī (29.395), haritamajjārī (8.686),²⁰⁹ hemākulī (6.116), hrasvavallī (8.558), indurā (8.579), jharasī (8.527–530),²¹⁰ kāravallī (19.311),²¹¹ karavanda (8.794 and 988),²¹² kṛṣṇanimba (8.636), kṣudrapanasa (8.725),²¹³ kūkavṛkṣa (15.270), lakṣmī (8.572–574),²¹⁴ lāva-ṇḍikā (8.588), mahātila (8.325), mahāvallī (8.558),²¹⁵ mṛdupuṣpī (8.577), paṅktimūlī (20.445), paphaṇa (8.799), papphaṇa (21.218),²¹⁶ parvapattrā (8.579), pītabarbara (8.593), raktakāṇḍā (8.577), sadābhadrā (21.520),²¹⁷ siṅcantī (8.778),²¹⁸ śramaṇī (8.580), śuklabarbara (8.593),²¹⁹ sūrāphala (8.799), śvetapākī (8.788), śvetavallī (8.558), śvetī (29.395), toraṇa (8.798), toyalakṣmī (8.575), ucchāphala (8.799), uttamakanyā (8.567; 19.189, 302, 317), uttuṇḍakī (8.813),²²⁰ vanasūraṇa (8.656),²²¹ vraparohī (21.520),²²² and vṛttapattrā (8.581).²²³

The name of the author is mentioned at the end of the work. The maṅgala at its beginning indicates that he was a devotee of Viṣṇu, and probably a resident of Southern India because Śrīraṅga²²⁴ is referred to.

Anantakumāra's sources prove that his date is later than those of Tisaṭa, Candrāṭa, and Bhojarāja, which means that he composed his work after the eleventh century. This upper limit is confirmed by a quotation from the *Mādhavadravayagūṇa*.²²⁵ The lower limit is difficult to establish in the absence of references to Anantakumāra by later authors. The quotations from a *Yogaratanasamuccaya* in the *Yogaratanākara* are not of much avail, because Candrāṭa's work of that name may be cited. The period of composition depends on the dates of the *Tantrasārasaṃgraha* which is quoted as *Nārāyaṇīya*, and the *Sahasrayoga*, also quoted by Anantakumāra. Anantakumāra's work may therefore have been compiled after the fifteenth or sixteenth centuries.

ANTARAṆGANĀRĀYAṆADĀSA: *Ratnamālā*.²²⁶

APRAMEYA: (1) *Vaidyagrantha*²²⁷ and (2) *Viṣavaidya*.²²⁸

ARUṆAGIRI, son of Rāmacandra, of Bhārgavagotra: *Guṇapāṭha*,²²⁹ a treatise on materia medica and some other subjects, such as anatomy and the constitutions.²³⁰ The author, who claims to be well versed in Vedānta, salutes Aruṇādrīśa, and was therefore probably a resident of Tiruvaṇṇāmalai in the South Arcot district of Tamiḷnāṭu or of some part near it.²³¹ This is confirmed by the dedication of his *Vaidyasāramu* to two deities residing in Aruṇācala.²³²

Arunagiri was a contemporary of king Devarāya II (A.D. 1423–1446) of Vijayanagara²³³ and thus belongs to the fifteenth century.²³⁴

Several members of Arunagiri's family lineage were active as writers of literary works.²³⁵ Ḍiṇḍimabhaṭṭa I, a maternal uncle, was the court poet of Devarāya I (A.D. 1406–1422); Rājanātha Ḍiṇḍima II wrote the *Sāluṇvābhyyudaya*,²³⁶ and Ḍiṇḍima Sārvabhauma, his son, the *Rāmābhyyudaya*.²³⁷ Arunagiri II was the author of the *Vīrabhadravijaya*,²³⁸ and Rājanātha III of the *Acyutarāyābhyyudaya*²³⁹ and *Bhāgavatacampū*.²⁴⁰

AŚOKAMALLA(RĀJA): *Nighaṇṭusāra*.²⁴¹

BĀHAḌA: *Samnipātanidānacikitsā*.²⁴²

BĀHAṬA: *Rasamūlikānighaṇṭu*.²⁴³

BAKHAT SINGH: *Bakhatvilāsa*. The author was a king of Ajaigarh State in Madhya Pradesh.²⁴⁴

BALABHADRA: *Jvarapaddhati*.²⁴⁵

BĀLĀCĀRYA: *Suśrutasāra*,²⁴⁶ a summary of the *Sūtra*- and *Nidānasthāna* of the *Suśrutasaṃhitā*, with an attempt at summarizing other parts as well. The author praises Candrāṭa, Caraka, Dhanvantari, Suśruta, and Vāgbhaṭa in the opening lines.²⁴⁷

The *Suśrutasāra* is referred to in Lakṣmīkuśala's *Vaidyakaśāratnāprakāśa*.

BALIBHADRA: *Vṛndasaṃgrahaśeṣa*.²⁴⁸

BAṆĀRATANAYA: *Bālabodha*.²⁴⁹

BHAIRAVĀNANDA: *Tantrasārāvalī*.²⁵⁰

BHĀRATAKARṆA: *Tattvakaṇikā*, a part of a larger work called *Siddhausaḍhasaṃgraha*.²⁵¹ The author claims in the first few lines that āyurvedic medicines have a slow action, whereas the drugs he is going to describe cure diseases within a short time.²⁵² This means probably that the treatise mainly deals with *rasauśadhas*.

BHĀRGA RĀMA: *Cikitsānavanīta*.²⁵³

BHĀRGAVĀCĀRYA: *Nāmasaṃgrahanighaṇṭu*.²⁵⁴

BHĀSKARA: commentary on the *Rasabhedhiyapraṣṭārapradarśana*.²⁵⁵

BHAVADEVĀ: *Samnipātacandrikā*.²⁵⁶

BHAVĀNĪMĪŚRA: *Guṇaratnamālā*.²⁵⁷

BHĀVAŚARMAN: *Vyādhividhvaṃsinī*.²⁵⁸

BHĀVASIMHA: *Vyādhividhvaṃsinī*.²⁵⁹

BHĪṢAGĀRYA: *Abhidhānamañjarī*,²⁶⁰ a nighaṇṭu, chiefly concerned with synonyms of medicinal substances.

The work, the title of which is given at the beginning and end, is written in a variety of metres, and consists of 1,323 verses, arranged in four sections (*varga*). As stated by the author himself in the introductory and concluding verses, it is based on Vāgbhaṭa's *Aṣṭāṅgaḥṛdayasaṃhitā*, in which respect it resembles the *Aṣṭāṅga*- and *Madanādinighaṇṭu*. The first three sections correspond to three chapters of the *Sūtrasthāna* of the *Aṣṭāṅgaḥṛdayasaṃhitā*, which are mentioned by name in Bhīṣagārya's introduction, namely the chapters called śodhanādigaṇasaṃgraha (Sū.15), annasvarūpavijñāniya (Sū.6), and dravadravyavijñāniya (Sū.5).

The first and longest section, called madanādigaṇavarga, has thirty-two subsections and is chiefly devoted to medicinal plants. It agrees rather closely with the śodhanādigaṇasaṃgraha chapter of Vāgbhaṭa. Bhīṣagārya's groups of drugs are the same as those of Vāgbhaṭa, but he omits one of them (A.h.Sū.15.7), a compound group which

enumerates seven vargas with the same therapeutic effects.²⁶¹ Repetitions, which are frequent in Vāgbhaṭa's groups, are avoided by Bhiṣagārya, who also leaves out groups of drugs, such as, for example, triphalā.

Rather long strings of synonyms for each plant mentioned by Vāgbhaṭa are found in this work; another characteristic is the frequent distinction of more than one variety of plants regarded as of one single type in the *Aṣṭāṅgahṛdayasaṃhitā*. The therapeutic actions of the groups of drugs are listed at the end of each subsection, in conformity with Vāgbhaṭa.

The second section, called śūkadhānyādivarga, corresponds to Vāgbhaṭa's annasvarūpavijñāniya chapter. It has seven subsections, dealing with grains (śūkadhānya), pulse, sesamum, flax, etc. (śimbīdhānya), prepared foods (kṛtānna), flesh of various animals (māmsa), vegetables (śāka), fruits (phala), and various medicinal substances, such as salts, etc., along with groups of substances, such as pañcagavya, etc. (auśadha). The fourth subsection of section two differs from the corresponding verses of Vāgbhaṭa by including numerous anatomical terms.

The third section, called toyādivarga, agrees with the dravadravavijñāniya chapter of Vāgbhaṭa. It consists of five subsections, concerned with types of water (toya), milk and various dairy produce (kṣīra), the sugarcane and its products (ikṣu), oils (taila), and alcoholic drinks, including fermented beverages (madya). Some of the subsections contain more material than found in Vāgbhaṭa.

The fourth section, called saṃkīrṇavarga, which has no corresponding part in Vāgbhaṭa's work, has six subsections. The first of these is rather heterogeneous. The author remarks that he will enumerate in this subsection the synonyms of substances not yet dealt with.²⁶² It consists of synonyms of various organic and inorganic substances, odoriferous plants, tissues, colours, etc. The second subsection, called saṃjñādivarga, gives sets of names for plants already described in the first section; agni and all its synonyms may, for example, be used to designate citraka, śita and all its synonyms designate candana, etc. The third subsection, called ekārthavarga, is a list of names which are employed for only one plant. The fourth subsection, called dvārthavarga, opens the homonymic part of the *Abhidhānamāñjarī*, in which the meanings of the anekārthas are, as usual, given in the locative. The fifth subsection, called tryarthavarga, is a list of names of medicinal substances which have three meanings each. The sixth and last subsection, the caturādyarthavarga, begins with series of names of medicinal substances which have four, five, etc., meanings each. The last part contains verses on the synonyms for weights and measures, on rules prescribing the quantities of the ingredients of compound drugs, and on the synonyms for particular medicinal preparations.

The concluding verses give information on the author and his descent. The work ends with verses in praise of Dhanvantarī, who was incarnated again as Divodāsa in Kāśī.

The *Abhidhānamāñjarī* is profusely quoted as *Mañjarī* in the Kairālī commentary on the Uttarasthāna of the *Aṣṭāṅgahṛdayasaṃhitā*. Bhiṣagārya is praised in the anonymous *Tantrayukti*.

Noteworthy are the varieties of plants²⁶³ regarded as of one type by Vāgbhaṭa: two types of apāmārga (76–77): apāmārga and karkatāpippalī; two types of āragvadha²⁶⁴

(56–57): āragvadha and rājāhva²⁶⁵ = karnikāra; two types of ādraka (343–344): ādraka and āmrādraka;²⁶⁶ two types of arka (294–295): arka and rājārka; two types of ativiṣā (329–330): ativiṣā and śvetaraktaviṣā; five types of balā (98–102): balā, bṛhadbalā, atibalā, nāgabalā, kākabalā; two types of bhallāta (356–357): bhallāta and jambukabhallāta; two types of bhallūka (268–269): bhallūka = śyonāka, and phalgu; three types of brāhmī (400–402): brāhmī, maṇḍūkapaṇī, mahāmaṇḍūkapaṇī; two types of caṇḍā (395–396): caṇḍā and pītapuṣpikā; two types of cillī (807–808): cillī and hravapattā cillī; three types of dantī (40–42): dantī, dravanti, nāgadanti;²⁶⁷ two types of darbha (245–246): darbha and rājadarbha; two types of devadāru (64–65): devadāru and mahādāru; three types of dūrvā (103–104): dūrvā,²⁶⁸ sitadūrvā²⁶⁹ and gandhadūrvā; two types of gundrā (110–111): gundrā and gundrāṇī; two types of hapuṣā (320–321): hapuṣā²⁷⁰ and śvetaphalā hapuṣā;²⁷¹ many types of kadali (282–290); three types of kampilyaka (58–60): kampilyaka, hemadugdha, kaṅkuṣṭha; three types of karañja (25–27): karañja, vallīkarañja, pūṭika; two types of kāsamarda (314–315): kāsamarda²⁷² and sitakāsamarda; two types of kaṭurohiṇī (194–195): kaṭurohiṇī and pītarohiṇī; two types of khadira (215–216): khadira and gaurakhadira; three types of kharabusa (311–313): kharabusa = droṇa,²⁷³ rājākṣavaka, mahādrona; four types of koṣātakī (22–24): koṣavati, pītapuṣpakōṣavati, karkoṭakī = dhāmārgava, dhārākoṣātakī;²⁷⁴ two types of kurūṭa (270–271): kurūṭaka and kaṇḍūla;²⁷⁵ two types of kuṣṭha (62–63): kuṣṭha and kaubera; three types of kuṭheraka (305–307): white-flowered = vaikunṭha, dark-flowered = parṇāsa, and mahākuṭheraka; four types of laṣuna (822–825): laṣuna, kṣīrapalāṇḍu, grījanaka, raktalaṣuna; two types of madana (1–2): madana and piṇḍitaka; two types of meṣāśṛṅgī (221–222): meṣāśṛṅgī and setudruma;²⁷⁶ two types of misi (69–70): misi and miśreyā; three types of mūlaka (817–819): mūlaka, caṇakya, cañcuka; three types of nimba (5–7): nimba, nimbaraka = dreka,²⁷⁷ kṣṇanimba;²⁷⁸ two types of palāśa (226–227): palāśa and vallīpalāśaka;²⁷⁹ three types of pāṭalī (198–200): pāṭalī, nīlapuṣpa pāṭala, śvetapāṭalī; two types of paṭola (192–193): paṭola and kūlaka; two types of pattūra (815–816): pattūra and kṣetrajā pattūra; two types of pūga (233–234): pūga and mahākramuka; two types of rāsnā (66–67): rāsnā and mādhavapuṣpī; four types of śaṅkhinī (48–51);²⁸⁰ two types of sarala (277–278): sarala and tarala; four types of sarṣapā (36–39): sarṣapā, siddhārthaka, lohitasarṣapaka, kṣṇasarṣapā; two types of śiṃśapā (219–220): śiṃśapā and kuśiṃśapā;²⁸¹ two types of snuhī (46–47): snuhī²⁸² and venī;²⁸³ three types of sruvavṛkṣa (202–204): sruvavṛkṣa, kākataru, tāmrasāra; two types of śyāmā (44–45): śyāmā and mahāśyāmā; three types of śyāmāka (440–442): śyāmāka, toyaśyāmāka, hastiśyāmāka; two types of tagara (96–97): tagara and bhūmikadamba; the description of takkolaka and mārica (387–388); four types of tāla (223–225): tāla,²⁸⁴ hintāla,²⁸⁵ mahātāla,²⁸⁶ mṛtyuphalākhiya hintāla;²⁸⁷ two types of tejasvinī (298–299): tejovati and pārāvatapadi; two types of tilvaka (54–55): tilvaka²⁸⁸ and pratitilvaka; three types of tinduka (373–374): tinduka, kṣṇatinduka, kākenduka; two types of trapusa (11–12): trapusa and vanaja trapusa; three types of vaṃśa (812–814): vaṃśa, tṛṇavaṃśa = poṭagala, kīcaka; two types of viśālā (9–10): viśālā and mahāphalā viśālā; two types of vṛścīva (154–155): vṛścīva and śvetamūla vṛścīva.

The saṃkīrṇavarga refers to many plants which are not mentioned in the preced-

ing parts of the work; examples are: brahmadandī (1085), gandhataraṇī (1059), japā (1130), pitayūthikā (1054),²⁸⁹ rāmatarāṇī (1055),²⁹⁰ śaṅkha-yūthikā (1053),²⁹¹ taraṇī (1054),²⁹² vanavāsantī (1052), and vāsantī (1051).²⁹³

Information on the author is chiefly found in the concluding verses of his work, where he mentions that his name is Nārāyaṇa Bhiṣaj, also called Bhiṣagārya. His father was a physician, Viṣṇu by name,²⁹⁴ of Bhāradvāja gotra,²⁹⁵ who lived in Uṇṭurur,²⁹⁶ situated three yojānas to the east of Gokarṇa.²⁹⁷

The verses at the end of the *Abhidhānamāñjarī*, which inform us about the descent of Bhiṣagārya, are repeated at the end of the anonymous *Tantrayukti*, where it is added that Nīlamegha, the author of the *Tantrayuktivivāra*, was a descendant of Bhiṣagārya. The *Abhidhānamāñjarī* is therefore earlier than the *Tantrayuktivivāra*. It is also anterior to the *Kairālī* commentary on the *Aṣṭāṅgahṛdayasamhitā*, which often quotes it. The materia medica described in the *Abhidhānamāñjarī* points to a rather late date. Five types of balā, for example, would be very unusual for an early work.²⁹⁸ The numerous varieties mentioned are, in general, in favour of assigning the work to a period after the composition of the *Rājanighaṇṭu* and *Bhāvaprakāśa*, i.e., after the sixteenth century.

BHĪSĀTĀCĀRYA: quoted as a medical author by Raghunandana Bhaṭṭācārya in his *Mamāsātattva*.²⁹⁹

BHOLĀNĀTHA: *Āyurvedoktadravyagunābhidhāna*.³⁰⁰

BILHAṆA: *Manoramāvaidyaka*.³⁰¹

BODHIKAVI: *Paryāyamāñjarī*.³⁰²

BRĀJANĀTHAŚARMA: *Vaidyakaśāroddhāra*.³⁰³

This work is a therapeutic treatise, divided into twenty-three chapters (pariccheda).³⁰⁴ Chapters one to eighteen deal with the treatment of the diseases, arranged according to the order established by Mādhava. Chapter nineteen is concerned with the śodhana and māraṇa of eight dhātus (suvarṇa, raupya, tāmra, śisaka, vaṅga, kāmśya, lauha, and abhraka), the preparation of rasasindūra, and the purification of a large number of medicinal substances. Chapter twenty is about rasāyana and vājīkaraṇa. Chapter twenty-one is devoted to substitutes for a number of drugs, substances regarded as essentially beneficial (svabhāvato hitāni), and a few mantras thought to increase the action of drugs. Chapter twenty-two deals with a long series of medicinal preparations,³⁰⁵ as well as with milk and dairy products, urine, and oils. Chapter twenty-three is about pañcakarman and related procedures, and also about the various ways of examining a patient.³⁰⁶

Prescriptions of an āyurvedic type and rasayogas are found side by side in the *Vaidyakaśāroddhāra*. The author incorporated a few mantras.³⁰⁷ The materia medica does not present noteworthy features.

Sources are occasionally referred to: *Bhairavatantra* (276),³⁰⁸ Caraka (363 and 400),³⁰⁹ *Rasārṇava* (79), *Ratnapradīpa* (24), and *Vāgbhata* (362).³¹⁰

Snāyuroga (236), somaroga³¹¹ and mūtrātisāra (270–272) are known to the author. The chapter on strīroga (16) gives prescriptions which tighten the vagina, remove a

foul smell, increase fertility, facilitate delivery, etc. Chapter nineteen describes the purification of jayapāla, the seeds of dhustūra,³¹² the seeds of vṛddhadāraka, kāphiṅga,³¹³ viṣatinduka and viṣamuṣṭika, the milky sap of snuḥī, bhallātaka, guggulu, hiṅgu, dantī, trivṛt, citraka, devaviṣa,³¹⁴ the bile of various animals, rasona,³¹⁵ śakrāśana,³¹⁶ and leeches.

The author does not mention his name. He is called Brajanāthaśarma by the copyist and was evidently a resident of Assam.³¹⁷

The date of composition remains unknown. The only complete MS dates from 1850/51.³¹⁸ The editors of the *Vaidyakaśāroddhāra* assume that its author is later than Gopālākṣṇa, who wrote the *Rasendrasārasaṃgraha*, and Śivadāsasena.³¹⁹

BRĤASPAṬI: *Jvarāvalī*.³²⁰

CAKRAPĀNIDATTA: *Aśeṣatantrasaṃgraha*.³²¹

CAKRAPĀNIDATTA, a namesake of the famous commentator on the *Carakasamhitā*, was the author of a medical lexicon, called *Śabdacandrikā*.³²²

The *Śabdacandrikā*³²³ enumerates only strings of synonyms, adding the Bengali names of medicinal plants in the margin.³²⁴ The work consists of 734 verses, arranged in nine chapters (varga). The maṅgala is addressed to Heramba.³²⁵

Chapter one (vṛkṣādivarga; 360 verses), by far the longest, deals with medicinal plants (4–337), types of plants, and names for their parts. Chapter two (svarṇādivarga; twenty-eight verses) is about inorganic substances, and some of vegetable or animal origin.³²⁶ Chapter three (ghṛtādivarga; twenty-six verses) about dairy, products of the sugarcane, rice and other cereals, pulse, and some more articles of food, chapter four (bhūmyādivarga; fifty-seven verses) about kinds of earth, poisons, fishes and other aquatic animals, the elements, sun, moon, and various other subjects, chapter five (manuṣyavarga; fifty-six verses) about anatomical terms, chapter six (siṃhādivarga; ninety-six verses) about mammals, birds, and some other classes of animals, chapter seven (madyādivarga; thirty-two verses) about alcoholic and other fermented fluids, prepared dishes, etc., chapter eight (pañcakaṣāyādivarga; thirty-six verses) about a number of medical technical terms, and chapter nine (triphalādivarga; forty-three verses) about groups of substances.

The *Śabdacandrikā* was obviously modelled upon the *Amarakoṣa*. The major part of chapter one (4–311 and 338–360) corresponds to the vanaśādivarga of the latter work; it describes the plants in the same order and repeats the same synonyms, to which, however, many new ones are added. Verses 325cd–337 of chapter one, on lotuses and water-lilies, correspond to those on the same subject of the vārivarga of the *Amarakoṣa*. Chapters two and three agree with verses from the vaiśyavarga. The subjects of chapter four are mostly from the vārivarga, those of chapter five from the nṛvarga, those from chapter six from the siṃhādivarga. The verses of chapter seven agree partly with the śūdravarga, and those of chapter eight partly with the vaiśyavarga. On all these subjects the *Śabdacandrikā* adds synonyms from unknown sources to those found in Amarasimha's work. The names for groups of substances, found in chapter nine, are absent from the *Amarakoṣa*.

Cakrapāṇidatta acknowledges his indebtedness to Amarasimha's lexicon in one of the introductory verses. The concluding verse refers physicians in search of information not contained in the *Śabdacandrikā* to lexica like the *Śabdārṇava*.³²⁷

The *Śabdacandrikā* has been used as a source in the *Śabdakalpadrūma*, *Vācaspatya*, and *Vaidyakaśābdasindhu*.

Medicinal plants added to those mentioned in the *Amarakoṣa* are: akheḍa (1.321cd), arkamūlā (1.316ab), aśvaśākhoṭa (1.18ab),³²⁸ bhaṅgā (1.260ab and 3.25cd),³²⁹ bhavya (1.14cd),³³⁰ bhūmicampaka (1.87ab),³³¹ dhananḍa (1.16cd),³³² dugdhapucchi (1.320cd), gaṇḍagātra (1.14ab),³³³ ghṛtamaṇḍa (1.315cd), grīṣma-sundaraka (1.246cd),³³⁴ hastiśuṇḍā (1.98ab),³³⁵ jīvala (1.16cd),³³⁶ kaṅkālī (1.317ab),³³⁷ keśadhārīṇī (1.323ab), khaḍgakoṣa (1.324cd), kṛṣṇakhadira (1.65cd), kṣudrajīra (1.314cd), kukkura (1.323cd),³³⁸ kurumba (1.13ab),³³⁹ laṅkāsthāyī (1.324ab), lavanī (1.14ab),³⁴⁰ limpāka (1.12cd),³⁴¹ madhukarkaṭikā (1.12cd),³⁴² mahākāṇṭakīṇī (1.322cd),³⁴³ mahārḍra (1.15ab),³⁴⁴ parūṣa (1.14cd),³⁴⁵ raktakhadira (1.65cd), rāmadūṭī (1.312),³⁴⁶ sarpākṣī (1.317cd),³⁴⁷ śītalī (1.314ab), śṛgālakāṇṭaka (1.247cd),³⁴⁸ śuklāguru (1.214ab), sumadra (1.15ab), śvasuta (1.247cd), trikaṇṭa (1.322ab),³⁴⁹ vāmana (1.316cd), and veśādāla (1.319cd).

Some synonyms in Cakrapāṇidatta's work are sanskritized forms of vernacular names, e.g., cakrakulyā,³⁵⁰ helañcī,³⁵¹ kucikā,³⁵² and vāvala.³⁵³ A few terms are of Persian origin, for example rogana³⁵⁴ and vātingana.³⁵⁵

Some series of synonyms show that Cakrapāṇidatta's identifications of a number of medicinal plants deviate from those of other medical lexica. Some of the names of prasāraṇī (1.279) prove that he had the plant *Paederia foetida* Linn. in mind;³⁵⁶ śrī-hastinī, often regarded as a synonym of kurupṭikā,³⁵⁷ is regarded as identical with hastiśuṇḍā.³⁵⁸ Confusion is created in some cases by mentioning one and the same name for different plants: prṣṇiparnī is, for example, the name of a particular plant (1.140–142), as well as a synonym of śālaparnī (1.188cd–189ab).

The Cakrapāṇidatta who wrote the *Śabdacandrikā*³⁵⁹ cannot be the same as the author of the *Cakradatta*, *Āyurvedadīpikā*, etc., since the *Śabdacandrikā* describes bhaṅgā³⁶⁰ and many other plants unknown to him. The *Śabdacandrikā* is also acquainted with the difference between the fruits called bhavya and karmaraṅga,³⁶¹ and with those called gaṇḍagātra and lavanī; the latter two are not indigenous and were introduced into India from South America.

The inclusion of bloodletting among the procedures called pañcakarman (8.2cd–3ab) also speaks against an early date of the work. The same applies to synonyms like sukhānā and khilānā for cullī (a fireplace; 8.8). Moreover, it is more than unlikely that an author like the earlier Cakrapāṇidatta, well versed in āyurveda, would base one of his works on Amarasimha's lexicon.

The materia medica of the *Śabdacandrikā* proves that the work has been written after the introduction of *Annona* species into India, i.e., after the advent of the Portuguese.

CAKRAPĀṆIMĪŚRA: *Viśvavallabha*.³⁶²

CAMATKĀRA: *Vaidyaprakāracamatkārasāyana*.³⁶³

CHOYI VAIDYAR of Pāloḷi: *Cikitsāpraveśaka*.³⁶⁴

CIDGHANĀNANDANĀTHA: *Satkarmasaṃgraha*.³⁶⁵ The work begins with a maṅgala addressed to Ādinātha, who created the mahākālayaśāstra; an introductory verse praises the author's guru, Gaganānandanātha. The treatise is said to deal with the curing of diseases by means of yogic practices, helped by medicines. At the end of the work a dhvajabasti is described, employed in the treatment of āsmarī and mūtrakṛcchra.

Sources mentioned are the works of Gorakṣa and other Mahāsiddhas and Nāthas.³⁶⁶

The *Satkarmasaṃgraha* shows the influence of Śrīnivāsaḥaṭṭa's *Haṭharatnāvalī*.³⁶⁷

CIKKAṆAPAṆḌITA: *Vaidyanighaṇṭusāra*.³⁶⁸

DAKṢA, son of Bāṇāra: *Yogasāra*.³⁶⁹

DAKṢARŪPA: *Pathyāpathyavidhi*.³⁷⁰

DĀMODARA: *Bhīmavinoda*.³⁷¹ According to P. Cordier, this treatise, also called *Bhī-masenavinoda*, consists of two parts, a cikitsākhaṇḍa of fifty-four and an uttarakhaṇḍa of two chapters; karmavipāka and Tantric elements abound in its therapeutics, which make it resemble the *Virasimhāvaloka*.³⁷² P.V. Sharma added to this description that it is an extensive work, later in date than the *Bhāvaprakāśa*, since phiraṅgaroga and rasakarpūra are mentioned in it.³⁷³

DĀMODARA(MĪŚRA): *Harivandanasamgraha*.³⁷⁴

DĀMODARA: *Rāmabāṇa*.³⁷⁵

DĀMODARA: *Yogaratanasekhara*.³⁷⁶

DĀMODARABHAṬṬA CITTAPĀVANA, son of Raghunātha and Jānakī: *Āyurvedasaṃgraha*.³⁷⁷

DĀNADĀSA: *Āryaphatahadeśabhiṣagdānādāsavaidyakācāra*. This treatise, preserved in the Tibetan Tanjur under the title of *Hhags-yul pha-ta-haḥi sman-pa Da-na-da-saḥi sman-bcos-rnams*, and attributed to the Indian physician Dānadāsa from the country called Phataha, is a short formulary. It contains a number of magical squares and mentions opium.³⁷⁸

DATTASŪRI: *Parahitasiddhānta*.³⁷⁹

DĀŪJĪ: *Vaidyaka(koṣa)*.³⁸⁰

DAULATAKHĀN, son of Aliphkhān: *Daulatavinodasārasamgraha*.³⁸¹

DAYĀRĀMA: *Ārogyamālā*.³⁸²

DAYĀRĀMA: *Dayāvilāsa*.³⁸³

DAYĀŚAMKARA: *Cikitsākalikā*.³⁸⁴

DEVADĀSA, son of Devadatta and Nāgamā: *Cikitsāmr̥tasāgara* or *Karmavipākā-cikitsāmr̥tasāgara*, a large compilation, arranged in more than seventy chapters (tarāṅga); the diseases and their treatment are discussed from a medical, religious, and astrological point of view; the author has extensively drawn upon the *Ātreyaśamhitā*, *Mādhavanidāna*, *Madhukośa*, and *Śāringadharasamhitā*.³⁸⁵

DEVĪCANDRAVYĀSA: *Paṭṭiprakāśa*.³⁸⁶

DEVĪDATTA: *Vaidyaratnāvalī*.³⁸⁷

DHANANJAYA: *Tailāntatāilānirmānavidhi*.³⁸⁸

DHANVANTARI: *Vaidyabhāskarodaya*.³⁸⁹

DHANVANTARIKARA: *Āyurvedasārāvalī*, a comprehensive medical work that appears to be a modern compilation. The author, a Vaidya by caste, hailed from East Bengal.³⁹⁰

DHARANĪDHARAVYĀSA: *Dravyaguṇasārasarvasva*.³⁹¹

DHĪRAJARĀJA: *Cikitsāsāra*.³⁹²

DHUNDIRĀJA(KAVI): *Añjanavyākhyā(?)*.³⁹³

GAHANANĀTHA: *Yogarātnākara*.³⁹⁴

GAṆAPATIVYĀSA, son of Mahīdharavyāsa: *Yoga(sāra)samuccaya* or *Vaidyakaśāstra-sārasaṃgraha*,³⁹⁵ a work in seven chapters: rasavīryādhikāra, dhātuvīryasodhanamāraṇa, saṃnipātakṛmicikitsā, atisārādicikitsā, mūtrakṛcchrādicikitsā, śvāsādicikitsā, and kuṣṭhādicikitsā.³⁹⁶

Vyāsaganapati's *Yogasamuccaya* is one of the sources of the *Rasayogasāgara*.

GANDHE UPĀDHYĀYA: *Cikitsābhīdhāna* or *Cikitsāvidhāna*.³⁹⁷

GAṆEŚABHIṢAJ: ³⁹⁸ (1) *Arthaprakāśikā*, a commentary on the *Mādhavanidāna*,³⁹⁹ (2) *Cikitsāmr̥ta*,⁴⁰⁰ (3) *Sāraratnāvalī*,⁴⁰¹ (4) *Yogacintāmaṇi*.⁴⁰²

GAṆEŚABHIṢAJ, son of Hari(nātha) Bhaṭṭa of Dvārakā, and grandson of Śrī Kṛṣṇa of Śrīvatsagotra.⁴⁰³ (1) *Śābdamālā*,⁴⁰⁴ (2) *Sārasaṃgraha*.⁴⁰⁵

GAṆEŚADĀSA: *Dravyādarśa*.⁴⁰⁶

GAṆGĀDHARA, son of Candanārya: *Bheṣajakalpa*.⁴⁰⁷ This work was translated into Telugu by Cilkmaṛṇi Veṅkaṭācārya, who lived in the middle of the sixteenth century.⁴⁰⁸

GAṆGĀDHARA, or Joṣī Vaidya Bāpū Gaṅgādhara: *Nighaṇṭuprakāśa*, a probably modern, alphabetically arranged dispensatory.⁴⁰⁹

GAṆGĀDHARA, son of Dāsa: *Yogarātnāvalī*, in twelve chapters, on materia medica, the therapy of various diseases, and metallic preparations.⁴¹⁰ The titles of the chapters are: (1) rasādiguṇavarṇana; (2) auśadhīnām guṇavarṇanam; (3) rasadhātumiśragu-

ṇavarṇana; (4) rasarājaśodhana; (5) dhātuśodhana; (6) rogānām cikitsāvidhiḥ; (7) atisārādinām vidhiḥ; (8) rogarājādi; (9) kuṣṭhādividhi; (10) pramehādividhi; (11) vājīkaraṇa; (12) kaṣāyauśadhīnām yogādi.⁴¹¹

GAṆGĀDHARA: *Yogasāra*.⁴¹²

GAṆGĀRĀMA: *Rājayogaratnākara*.⁴¹³

GAṆGĀRĀMA: *(Sadyoga)ratnāvalī*.⁴¹⁴

GAṆGĀRĀMADĀSA, pupil of Bhavānīdāsa Kavirāja: *Śārāvinīścayādhikāra*,⁴¹⁵ a work on the management of females during pregnancy.⁴¹⁶

GAṆGĀŚARAṆA CATURVEDIN of Bharohiya: *(Bṛhaj)jagḍiprakāśa*, probably a modern work.⁴¹⁷

GAṆGEŚA or VAIDYAVILOCAN: *Gaṅgeśavallabha*.⁴¹⁸

GHANAŚYĀMASŪRI: *Guṇacandrikā*.⁴¹⁹

GĪRVĀṆAYUDDHAVIKRAMA, son of Raṇabahādūra: *Vājirahasyasataka*.⁴²⁰

GOKULANĀTHA: *Vaidyādarśa*.⁴²¹

GOMMAṬA is regarded as the author of the *Merutantra* and, probably, a *Vaidyasamgraha*.⁴²² The *Merutantra*⁴²³ is sometimes regarded as a medical work.⁴²⁴

Pūjyapāda is mentioned with reverence in Gommaṭa's *Merutantra*.

The *Merutantra* is quoted in the commentary on the *Siddhabheṣajamaṇimālā*. It is referred to in the *Dattātreyatantra* and Nāgārjuna's *Kakṣapūṭa*, and was one of the sources of Basava's *Śivatattvaratnākara*.

GOPĀLADĀSA: (1) *Cikitsākramakalpavallī*,⁴²⁵ (2) *Cikitsāsāra*,⁴²⁶ (3) *Gopālavinoda*,⁴²⁷ (4) *Vaidya(sāra)samgraha*.⁴²⁸

GOPĀLADĀSA, son of Balabhadra: *Vaidyavilāsa*.⁴²⁹

GOPĀNANDA, son of Padmānandamīśra: *Vātakasataka*.⁴³⁰

GOPĪNĀTHA: *Strīcikitsāpaddhati*.⁴³¹

GOVARDHANA: *Vaidyakagrantha*.⁴³²

GOVARDHANA(NĀTHA): *(Nighaṇṭu)nāmāvalī*.⁴³³

GOVARDHANAVAIDYA: (1) *Cikitsāleśa*; (2) *Rogapradīpa*.⁴³⁴

GOVINDA, son of Keśava: *Karṣādīpramāṇa*, a work on measures and weights used in medicine.⁴³⁵

GOVINDA: *Lokopakāraka*.⁴³⁶

GOVINDA: *Sārasamuccaya*.⁴³⁷

GOVINDADĀSA: *Govindadāsotsava*.⁴³⁸

GOVINDADEVA: *Yogoktilīlāvatī* or *Aṣṭāṅgahṛdaya(samhitā)*.⁴³⁹

GOVINDAMĪŚRA: *Govindaprakāśa*.⁴⁴⁰

GOVINDARĀJA (KAVIRĀJA), son of Divākaraṇḍita: *Camatkāracintāmaṇi*.⁴⁴¹
GOVINDARĀMA TRIPATHIN: *Bhāvaprakāśa*.⁴⁴²

GOVINDASENA's *Paribhāṣāpradīpa*⁴⁴³ is a compilatory work on rules, definitions and technical terms (*paribhāṣā*), pertaining to the preparation of medicines and related issues.

The treatise consists of 615 verses, arranged in four chapters (*khaṇḍa*).

The subjects of chapter one (131 verses) are: introduction (1–6); weights and measures according to the *kāliṅga* (10–28) and *māgadha* (30–45) systems; rules about doubling the prescribed quantity if fresh drugs are used (46–52); the storage life of drugs (53–57); suitable and unsuitable places for the collection of fresh drugs (59–64); ritual prescriptions concerning their collection (65–68); parts of plants suitable to medicinal use (69–73); the appropriate seasons for the collection of particular plant parts (75–76); rules to be applied when particular details are wanting in the texts (77–87); substitutes for drugs which are not available (88–131).

Chapter two (77 verses) deals with the five types of *kaṣāya* (1–4): *svarasa* (5–16), *kalka* (17–19), *kvātha* (20–24), *śīta* (25–27), and *phāṇṭa* (28–30); types of pills (31–33); dosages and ratios of ingredients (34–57); the preparation of a *yavāgū*, *maṇḍa*, *peyā*, *bhakta* (58–67); the preparation of *māmsarasa* and *lākṣārasa* (68–70); the *prakṣepa*, and related subjects (71–77).

Chapter three (197 verses) is concerned with *snehapāka* (1–51); *guggulupāka* (52–56); the processing of metals (*lohapāka*; 57–78); *bhāvanā* (79–81); some subjects connected with *pāka* (82–86); *anupāna* (87–107); dosages in children (108–114); suitable times for taking a medicine (115–137); generalities about therapeutic measures (138–145); groups of medicinal substances (146–165); characterizations of a number of substances, such as *veśavāra*, *śukta*, *tuṣāmbu*, etc. (166–197).

Chapter four (210 verses) gives an account of *pañcākarma* and some related topics: introductory matter (1–5); *vamana* (6–34); *virecana* (35–60); *nasya* (61–79); *anuvāsana* (80–116); *nirūha* (117–142); *uttarabasti* (143–161); *dhūmapāna* (162–174); *kavala* and *gaṇḍūṣa* (175–186); *raktamokṣaṇa* (187–192); *murchana* (193–201);⁴⁴⁴ *fragrant substances* (*gandhadravya*; 202–210).

Authorities mentioned in the text are *Kāśirāja* (1.84) and *Patañjali* (3.63).

Sources from which the author borrowed verses are: *Amoghatantra* (3.74–77),⁴⁴⁵ *Ānandasena* (4.48 and 160–161),⁴⁴⁶ *Caraka* (3.139 and 187; 4.7), *Cikitsāmaṇḍita* (4.132–133),⁴⁴⁷ *granthāntara* (3.81; 4.31, 88, 89–92), *Keśarīṭikākāra* (2.57),⁴⁴⁸ *Patañjali* (3.67–70),⁴⁴⁹ *Śārṅgadhara* (1.8, 49, 58, 70; 2.20–21; 3.25; 4.35, 121–131, 143–159, 175–182),⁴⁵⁰ *Trivikrama's Lohapradīpa* (3.57–64),⁴⁵¹ *Vāgbhaṭa* (4.150–151), and *Viśvāmitra* (2.3).

The *Paribhāṣāpradīpa* is quoted in *Āsubodha* and *Nityabodha* Senagupta's commentary on the *Rasaratnasamuccaya* (8.1; 10.75).

Authorities and works quoted or referred to in the comments added to the text⁴⁵² are: *Cakra* (2.72), *Cakradatta* (2.72), *Cakradatta's Svasaṃgraha* (2.39 and 71), *Cakrapāṇidatta* (2.57 and 71), *Cakrapāṇikṛtasamgraha* (3.18–23), *Caraka* (2.39), *Dr̥ḍhabala* (4.119–120), *guravaḥ* (1.72–73; 2.31–33, 39, 52–53, 57, 72, 74, 76–77),

Kāśirāja (1.81–82 and 84), *Maheśvara's Cakraśeṣaṭikā* (3.33),⁴⁵³ *Nārāyaṇadāsa* (2.57),⁴⁵⁴ *Nārāyaṇāntaraṅga* (2.57),⁴⁵⁵ *Niścalakara* (1.46; 2.57; 3.18–23), *Patañjali's Lauhaśāstra* (3.24), *Śārṅgadhara* (2.57), *Suśruta* (2.39; 3.99; 4.117), *Trivikrama* (2.31–33), *Vāgbhaṭa* (4.117), and *Yaśodharavyākhyāna* (3.1–4).⁴⁵⁶ Many quotations are from an unspecified source.

Āsubodha *Vidyābhūṣaṇa Bhaṭṭācārya*, one of the sons of *Jīvananda Vidyāsāgara*, wrote a commentary on the *Paribhāṣāpradīpa*, which mentions a large number of variants of the text.

Āsubodha's commentary quotes from or refers to: *Āḍhamalla* (1.10–25), *Amara* (1.7 and 112), *Cakra* (4.67), *Cakradatta* (2.71), *Cakrapāṇi* (1.98), *Cakrasaṃgraha* (1.95; 3.178; 4.77, 80–81, 176–177), *Caraka*, *Dr̥ḍhabala* (3.4), *Gaṅgādhara* (3.4, 23–24, 27–30), *Kaiyata* (1.2–3), *Kātyāyana* (1.4–5), *Kharanāda* (4.48), *Lauhapradīpa* (3.57–64), *Patañjali* (3.67–69), *Rājavallabha* (2.95), *Śārṅgadhara* (1.10–25; 3.25–26; 4.181), *Śivadāsa* and his *Cakraṭikā* (1.95 and 98; 2.58, 61, 71; 3.74–78 and 115–127; 4.53), *Śrīkānta* (1.10–25),⁴⁵⁷ *Suśruta*, *Taittirīyopaniṣad* (3.23–24), and *Vāgbhaṭa* (3.108–111; 4.189).

The author mentions his name, *Govindasena*, son of *Kṛṣṇavallabhasena*, in one of the introductory verses (1.2). His date cannot accurately be determined. *Govindasena* is later than *Śārṅgadhara*, *Nārāyaṇadāsa*, and *Trivikrama*, quoted by him, which means that he lived after the end of the fourteenth century, and earlier than A.D. 1873, the year of the first edition of his treatise.

GOVINDASŪNU: *Samnipātamañjarī*.⁴⁵⁸

GOVINDA VĀPAṬA: *Samnipātamañjarī*.⁴⁵⁹

GURUDATTASIMHA: *Yogarātnāvalī*.⁴⁶⁰

HARĀNANDADĀSA KAVICANDRA: *Cikitsāsārādīpikā*.⁴⁶¹

HARAPĀLA: *Vaidyaśāstra*.⁴⁶²

HARARĀMA: *Cikitsāsāra*.⁴⁶³

HARIBHARATĪ: *Cikitsāsāra*.⁴⁶⁴

HARICARANASENA was the author of the *Paryāyamuktāvalī*.⁴⁶⁵

This work is based on *Mādhava's Ratnamālā*,⁴⁶⁶ but the author rearranged its subject matter in a number of homogeneous sections, adding much that is new and omitting everything not connected with medicine.

The treatise contains 1,247 *ardhaśloka*s, arranged in the following twenty-three *vargas*: *sugandhi-*, *madhyagandha-*, *hīnagandha-*, *sāraja-*, *ratna-*, *dhātūpadhātu-*, *madhura-*, *amla-*, *uttamaśāka-*, *tiktaśāka-*, *puṣpa-*, *latāphala-*, *kanda-*, *mahāvṛkṣa-*, *madhyamāvṛkṣa-*, *hrasvāvṛkṣa-*, *latā-*, *śimbiśūkadhānya-*, *ṭṭṇadhānya-*, *bhaktādikṛtāna-*, *pāñiya-*, *āvaśyaka-*, and *bhautikādivarga*.⁴⁶⁷ This arrangement, which is rather new and original, finds a parallel only in *Hemacandra's Nighaṇṭuśeṣa*, by which it may have been influenced, and in *Gopīmohana's Paryāyamuktāvalī*.

After enumerating the items of a particular *varga*, the author gives synonyms of each of them, to which the vernacular equivalent is usually added.⁴⁶⁸ The homonymous section of the *Paryāyamuktāvalī* is much less developed than its synonymous

counterpart and covers only ardhśloka 206–279 of the bhautikādivarga.

Remarkable words are: kuliñja (2.32), ahiphena (6.49), kākendu (7.31), and jayapāla (15.15).

No particulars are known on the author.

Being based on Mādhava's *Ratnamālā*, the *Paryāyamuktāvalī* is later than A.D. 800–1000. Internal evidence establishes that it cannot be earlier than about the thirteenth century: jayapāla is mentioned for the first time in the *Mādhavadravyagūṇa*, ahiphena and kuliñjana are found in Soḍhala's *Gadanigraha*,⁴⁶⁹ and kākendu occurs in the *Dhanvantarinighaṇṭu*.⁴⁷⁰ A lower limit cannot be determined by reason of the absence of quotations from the *Paryāyamuktāvalī* by later authors.

HARIHARA: *Vaidyavallabha*.⁴⁷¹

HARIHARA NANDA: *Āyurvedasārasaṃgraha*.⁴⁷²

HARI KAVI, pupil of Vajrasena: *Karpūraprakaraṇa*.⁴⁷³

HARIPĀLA: *Yogacintāmaṇi*.⁴⁷⁴

HARIPĀLADEVA: *Yoganibandha*.⁴⁷⁵

HARIRĀYASARMA was the author of the *Haridhāritagrantha*.⁴⁷⁶

This treatise consists of about 190 verses⁴⁷⁷ and is divided into six chapters, which contain recipes, mostly of an āyurvedic type; the section on fevers of chapter one presents a number of rasayogas. A clear order in the arrangement of the diseases is absent, with the exception of chapter one, which deals with fever, diarrhoea, and grahaṇī, and the last chapter, which is mainly concerned with gynaecology, venereal diseases, and aphrodisiacs.

Some noteworthy disorders mentioned are: rasaśeṣajvara (7), pittodreka (30), pittadāha (30), mukhakīla (facial warts; 33), and kakṣādaugandhya (foul-smelling armpits; 43). The work ends with a description of the purification of jayapāla.⁴⁷⁸

Noticeable among the substances prescribed are akarkara (41), mājūphala (10), and mastakī (10). Sources are not referred to.

The author calls himself Hariśarma in the maṅgalācaraṇa; his name is Harirāyaśarma in the colophons.⁴⁷⁹

The contents of the work warrant the conclusion that it cannot be earlier than the thirteenth century, but it may have been compiled a number of centuries later.⁴⁸⁰

HARIŚARANASENA, son of Gadādhara Mahāseṇa Pātra: *Dravyagūṇākara* or *Satkaṇṭharatna*.⁴⁸¹

HARIṢEṆAPANDITA: *Jagatsundarīyogamālā*.⁴⁸²

HEMACANDRA, pupil of Devacandra: *Gadanigrahagrantha*.⁴⁸³

HEMAVIJAYA GAṆI: *Kastūrīprakaraṇa*.⁴⁸⁴

HERAMBASENA SAHAPATNĪ, son of Śubhasena, compiled the *Gūḍhabodhakasaṃgraha*, a work on the aetiology, symptomatology, and treatment of diseases. After a respectful salutation to Cakrapāṇi, Maheśvara, Mādhava and Nityanātha, the

author states that his treatise is based on the *Rasaratnākara* (of Nityanātha), the *Cakra(datta)*,⁴⁸⁵ and (the work of) Maheśvara, which implies that Herambasena cannot be earlier than Nityanātha.⁴⁸⁶

INDRADEVA: *Nāmasāgara*.⁴⁸⁷

ĪŚĀNACANDRA VIŚĀRADA: *Bhaiṣajyavijñāna*.⁴⁸⁸

ĪŚVARA: *Kalpārṇava*.⁴⁸⁹

JAGANNĀTHADATTA: *Cikitsāratna*.⁴⁹⁰

JAGANNĀTHAPRASĀDA ŚUKLA: *Anupānakalpataṛu*.⁴⁹¹

JANĀRDANA: ⁴⁹² (1) *Mūtraparīkṣā*; ⁴⁹³ (2) *Sadvaidyakaustubha*.⁴⁹⁴

JARARA: *Jvaraparājaya*.⁴⁹⁵

JAYADEVA: *Jvaraparājaya*.⁴⁹⁶

JAYADEVA: *Kvāthacikitsā*.⁴⁹⁷

JAYADEVASVĀMIN: *Vaidyāmṛta*.⁴⁹⁸

JAYAKRṢṆADĀSA, son of Venkaṭadāsa: *Cikitsāratna*.⁴⁹⁹

JAYAPĀLADĪKṢITA: *Madhukośa*.⁵⁰⁰

JAYARĀMA: *Cikitsāratnasamgraha*, a compilation from works on therapy.⁵⁰¹

JAYARĀMAGIRI or JAIRĀMAGIRI, pupil of Caitanyagiri: *Kalpādrumaśārasaṃgraha*, a work in a mixture of Sanskrit and Hindī.⁵⁰²

JAYARĀMAMIŚRA or JAIRĀMAMIŚRA: *Ānandārṇava*.⁵⁰³

JĪVARĀJA: *Samnīpātacikitsā*.⁵⁰⁴

JĪNĀVAJIRA: *Guhyāgnicakra*. This Tibetan demonological treatise of Tantric inspiration, translated from the Sanskrit and forming part of the Tanjur, mentions Revatī and other malevolent beings.⁵⁰⁵

KADAMBA: *Vaidyakadamba*.⁵⁰⁶

KADAMBEŚVARA: *Kautukacintāmaṇi*.⁵⁰⁷

KĀLĪCARAṆADATTA: *Cikitsāsārasaṃgraha*.⁵⁰⁸

KĀLĪPRASĀDA VAIDYA: *Sārasaṃgraha*.⁵⁰⁹

KALPARĀMA: *Bālatantra*.⁵¹⁰

KĀMADEVA: *Vaidyakalpadruma*.⁵¹¹

KAMALĀKṢA KAVIRĀJA of the Roṣa family: *Cikitsāttattvacandrikā*.⁵¹²

KĀMEŚVARA, son of Narendra (or Narahara Gauḍadyumaṇi), brother of Viśveśa Vidyānidhi, of the Puruṣottama family and of Gauḍadeśa: *Āyurvedasiddhāntasaṃbodhinī*, a work in two chapters (vṛtti), the first of which treats of several matters, especially dietetics, and the second of diseases and their treatment.⁵¹³

KANAKADATTAVAIDYA: *Tailārṇava*.⁵¹⁴

KANAKAPURAPADMAPANDITA: *Cikitsāsthāna*.⁵¹⁵

KĀNHA, son of Vastupāla: *Cikitsāratnabhūṣaṇa*.⁵¹⁶

KĀŚINĀTHA. Several works are ascribed to one or more authors of this name:⁵¹⁷ (1) *Bālabodhodaya* by Kāśinātha Caturvedin;⁵¹⁸ (2) *Cikitsādhātusāra* by Kāśinātha Dvivedin;⁵¹⁹ (3) *Cikitsākramakalpavallī* by Kāśinātha Caturvedin;⁵²⁰ (4) *Rasakalpalatā*;⁵²¹ (5) *Viṣoddhāra*.⁵²²

The *Cikitsākramakalpavallī* is one of the sources of the *Rasayogasāgara*;⁵²³ it is quoted in Hariśaraṇānanda's *Kūṭipakvarasanirmānavijñāna*.

KĀŚIRĀMA: *Vaidyasarvasva*.⁵²⁴

KAVĪNDRACANDRA: *Ratnāvalī*.⁵²⁵

KAVIŚEKHARA: *Prasūtikaraṇa* or *Strīcikitsā*.⁵²⁶

KAVISENA: *Gudaroga*.⁵²⁷

KEDĀRANĀTHA HAḌA: *Sadvaidyasadbhāvaviveka*.⁵²⁸

KENDRADEVA: *Nāmasāgara*.⁵²⁹

KEŚAVA was the author of the *Harigūṇa*, a short medical treatise in five chapters: (1) *kāyacikitsā*, *pañcakarman*, and *śalya* (184 verses); (2) *śālākya* (30 verses); (3) *viṣa* and *strīroga* (13 verses); (4) *rasāyana* (7 verses); (5) *vājīkaraṇa* (10 verses). The arrangement of the diseases disagrees with the *Mādhavanidāna*.⁵³⁰

Keśava was the son of Vatsa and Koṇḍambā; Vatsa's father was the physician Vidyādhara, the son of Bhrātara and the grandson of Nāganātha.

KEŚAVABHAṬṬA: *Laghunighaṇṭusāra*.⁵³¹

KONḌĀVADHĀNI: *Bāhataśāstra*.⁵³²

KRṢṢA: *Cikitsātattva*.⁵³³

KRṢṢA: *Dravyagūṇaratnākara*.⁵³⁴

KRṢṢADĀSA: *Dīpikākeraḷa*.⁵³⁵

KRṢṢAMIŚRA: *Sukhānandavinoda*.⁵³⁶

KRṢṢĀNANDA KAVIRĀJA: *Cikitsāsaṃgraha*.⁵³⁷

KRṢṢANĀTHAKAVIRĀJA: *Cikitsāsaṃgraha*.⁵³⁸

KRṢṢAPĀDA: *Pūtikātailanirmānavidhi*.⁵³⁹

KṢEMAJAYA: *Prabodhacandrodaya*.⁵⁴⁰

KṢEMAṆKARA MIŚRA: *Cikitsāsāra*, a work in seventy-eight chapters (*adhyāya*).⁵⁴¹

KṢEMAŚAṆKARAMIŚRA: *Cikitsāsāra*.⁵⁴²

KṢEMAŚARMĀCĀRYA, son of Gautama: *Cikitsāsārasaṃgraha*, in about 900 verses.⁵⁴³

KULAKĪRTI: *Añjanadīpikā*.⁵⁴⁴

LABDHICANDRA: *Bṛhallālacandrikā*.⁵⁴⁵

LAḌMAṆAKAVI: *Kāśyapatantra*.⁵⁴⁶

LAḌMĪDHARA: *Nidāna*.⁵⁴⁷

LAḌMĪDHARĀCĀRYA: *Karṇārṇava*.⁵⁴⁸

LAḌMĪNĀRĀYAṆA: *Gudavadanavivaraparīkṣāpañcaka*.⁵⁴⁹

LAḌMĪNĀRĀYAṆA: *Viṣopacāra*.⁵⁵⁰

LAḌMĪNĀTHA: *Laṅghanapathyanirṇaya*.⁵⁵¹

MĀDHAVA: *Prayogacintāmaṇi*.⁵⁵²

MĀDHAVA: *Tantrasāra*, a collection of aphorisms on the causes of maladies.⁵⁵³

BHĪṢAJ MĀDHAVA was the author of the *Kūṭamudgara*.⁵⁵⁴ This work⁵⁵⁵ is a very short treatise in twenty-one verses, which are, due to their compactness, difficult to interpret. It is accompanied by an auto-commentary.⁵⁵⁶

The work deals with the six tastes and their relationships with the *doṣas* (1–4), the *doṣas* in connection with the parts of day and night (5) and the stages of the digestive process (6), the bodily seats of the *doṣas* (7), and their association with the two halves of the year (8). After rules about the drinking of water in general and that from rivers in particular (9), the characteristics of incurable diseases are enumerated (10), followed by those of the sixty-two types of *saṃnipāta* (11–14) and the five *mahābhūtas* (15); the next subjects consist of the treatment of *vraṇas* (16), and the properties of *harītakī*, along with rules about its use (17–18). The tract ends with two verses on its qualities and one about its author.

Most of the verses of the *Kūṭamudgara* seem to be original, though verse sixteen is a quotation from the *Suśrutasaṃhitā*.⁵⁵⁷

The work is quoted in the *Āyurvedasaṃgraha* of Devendranātha and Upendranātha Senagupta.

No particulars are known on the author.

The work was written before the middle of the eighteenth century, because one of the MSS dates from A.D. 1747/48.⁵⁵⁸

MĀDHAVA KAVIRĀJA of Nārītagrāma: *Mugdhābodha*,⁵⁵⁹ a compilation from earlier works on the treatment of various disorders. It ends with a list of twenty-two authorities, among which the following may be mentioned: Bhāskara, Candranātha, Caraka, Gahananātha, Mahāśena, Maheśvara, *Nidāna*, *Pātañjala*, *Ratnāvalī*, *Sārakaumudī*, *Suśruta*, *Tantra*, *Tantranātha*, *Vābhāṭa*, *Vaidyasāgara*, and *Vṛddhāvāgbhaṭa*.⁵⁶⁰

The *Mugdhābodha* is probably later than Vaidyārāja's *Sukhābodha*,⁵⁶¹ because it partly agrees with the latter.⁵⁶²

MĀDHAVA PAṆḌITA: *Gadāsaṃjīvanī*.⁵⁶³ The introductory stanzas of one of the MSS⁵⁶⁴ enumerate the following subjects: (1) *rogaṇidāna*, (2) ..., ⁵⁶⁵ (3) *auśadhakalpa*, (4) *mūlikākalpa*, (5) *raktamokṣaṇa*, (6) *agnirakṣākarman*, (7) *śāstrakarman*, and (8) *mantra*. Topics dealt with in another MS⁵⁶⁶ are: *sarvaroganidāna*, *nāḍīnidāna*, *doṣatrāya*, *aśtīvātānidāna*, *pañtyaroganidāna*, *śleṣmaroganidāna*, *jvaranidāna*, *kṣayaroganidāna*, *grahīṇīnidāna*, *mehanidāna*, and *viṣūcyajīrṇanidāna*.

The *Gadāsaṃjīvanī* is quoted in a work called *Nāḍivijñāna*.⁵⁶⁷

The author, of Śrīvatsagotra and Āpastambasūtra,⁵⁶⁸ was a son of the poet and physician Tuḷḷuru Śarabharāju. He completed his father's medical treatise, the *Śarabharājīyam*. Mādhava Paṇḍita, who was called *vaidyavidyātrinetra*, may have lived in the seventeenth century.⁵⁶⁹

MĀDHAVĀCĀRYA: *Cikitsāratnasamgraha* or *Cikitsākalpapādapa*.⁵⁷⁰

MĀDHAVĀCĀRYA SALĀḌU: *Cikitsāsārasaṃgraha*, also called *Tribhuvanatilaka*.⁵⁷¹

MĀDHU: *Dravyagūṇaratnamālikā*.⁵⁷²

MĀGACANDRADEVA: *Māgarājapaddhati*, a work covering all the fields of medicine, including charms.

In a long introduction the author gives a detailed genealogy. He is a kṣatriya of Kauśalyagotra⁵⁷³ and a descendant of Rāma. His forefathers are Sahagala, Sāhana, Dharma, Maṅgaṭa, Abhaṭa, Saṃbhava, Manorā, Kajjala, Vaccharāja, Mahārāja, Gāgū, and Nāthūdeva. The three sons of Nāthūdeva were Tripuradāsa, Rūpacandra, and Māgadeva (= Māgacandradeva). Tripuradāsa had two sons, Kundā and Nicandā. Rūpacandra's three sons were Kālidāsa, Haridāsa, and Jevidāsa. Māgadeva's two sons were called Durgādāsa and Bhojarāja.

Sources mentioned in the introduction are Caraka, Hārīta, Suśruta, Tīsaṭa, Vāgbhaṭa, and Vaṅga(sena).⁵⁷⁴

The family to which Māgacandra belonged ruled at Sādhāraṇapura, a city identified as Sahāranpur in Uttar Pradesh by D.C. Sircar. This author claims that Sahagala or Sahigila is no other than the Panjabi family name Saigal. He connects this name with Hindī saikalgar (a polisher of metal arms and tools), which is the name of a minor caste found in the Sahāranpur region.⁵⁷⁵

The town of Sahāranpur was founded about A.D. 1340, in the reign of Muḥammad bin Tughluq (A.D. 1325–1351). Māgacandra does not appear to have flourished earlier than the fifteenth or sixteenth century.⁵⁷⁶

MAHĀDEVA: *Mahārasāyanavidhi*, taken from the *Kākacaṇḍeśvarīmata* or some other Tantra.⁵⁷⁷

MAHĀDEVABHIṢAJ: *Vaidyavinodasāra*.⁵⁷⁸

MAHĀDEVAPAṆḌITA, client of Rājasiṃha: *Rājasimhasudhāsindhu*.⁵⁷⁹

MAHENDRA: *Dravyāvalīnighaṇṭu*.⁵⁸⁰

MAHENDRA: *Vaidyakaśaṃgraha*.⁵⁸¹

MAHENDRA JAINA, son of Kṛṣṇa Vaidya: *Dravyāvalīsamuccaya*.⁵⁸²

MAHEŚA BHATṬA: *Cikitsāsāra*.⁵⁸³

MAHEŚACANDRA: (1) *Vaidyakaśaṃgraha*; ⁵⁸⁴ (2) *Vaidyakaśarvasva*.⁵⁸⁵

MAHO: *Cakṣuspratyaṣṭyārpanadr̥ṣṭikriyā* or *Ācārasmārakanyāsa*,⁵⁸⁶ attributed to the Indian physician Maho⁵⁸⁷ or Manaha.⁵⁸⁸ The Tibetan titles of this short work on the treatment of eye diseases, translated in the Potala by Lhun-grub,⁵⁸⁹ are *Mig-ḥbyed mthoṇ-ba don-lan*⁵⁹⁰ and *Lag-len zin-bris-su bkod*.⁵⁹¹

MALLADEVA: *Kālañāna*.⁵⁹²

MALLĀRIPAṆḌITA, son of Keśavācārya: *Vaidyakaḷpataru*.⁵⁹³ This is a rasaśāstra work in twenty-one chapters; the *Rasārṇava* is quoted in it.⁵⁹⁴ The same author may have written the *Aśvāyurvedasārasindhu*.⁵⁹⁵

MALLIṢEṆA: *Bālagrahacikitsā*.⁵⁹⁶

MĀNAJĪ, pupil of Sumatimeru: *Āyurvedasārasaṃgraha*.⁵⁹⁷

MAṆGALAGIRI SŪRI, of Gelavaṅgala family and Ātreya gotra, son of Jagannātha, was the author of a work called *Sūtrasthāna*.⁵⁹⁸

Its nine chapters have the following headings: (1) āyurvedasūtrasthāna, (2) rasasūtrābhidhāna, (3) saṃkhyāsaṃkhyeyasūtra, (4) ārogyasūtra, (5) tridoṣasūtra, (6) dhamaṇisūtra, (7) viśaprativīṣasūtra, (8) yantrasūtra, and (9) āsuracikitsāsūtra.

Maṅgalagiri also wrote a commentary on Bharadvāja's *Bheṣajakalpa*. A *Rasasūtrābhidhāna*⁵⁹⁹ is sometimes regarded as a commentary on (a portion of) the first chapter of Bharadvāja's *Rasapradīpikā*.

Maṅgalagiri is described as an erudite scholar, well versed in medicine, rasaśāstra, mantrasāstra, etc.⁶⁰⁰

MAṆGARĀJA: *Khagendramanidarpaṇa*.⁶⁰¹ This treatise, arranged in sixteen chapters, written in Kannaḍa, deals with the treatment of various diseases, but is chiefly concerned with snake-bites and poisons in general. Four types of medicinal preparation are prominently present in the work: nasya (an errhine), pāna (a fluid for internal use), lepa (a paste for external application), and añjana (a collyrium). Mantras are repeatedly mentioned.

Authorities referred to are Jina and Pūjyapāda.

The author, also called Maṅga(ṇa) and Maṅkhaṇa, lived in the Hoysala country and wrote his treatise during the reign of Harihara I of Vijayanagar⁶⁰² (about A.D. 1336 to 1356),⁶⁰³ or somewhat later.⁶⁰⁴ His mastery in Kannaḍa and Sanskrit earned him the titles of ubhayakaviśa, kavipadmabhāskara, and sāhityavaidyavidyāmbudhi.

MAṆI: *Yogāñjana*.⁶⁰⁵

MĀNIKYA, son of Padmanābha: (*Samnipāta*)*padacandrikā*, a commentary on the anonymous *Samnipātacandrikā*, a monograph on fevers.⁶⁰⁶

MAṆIṢIN, son of Haradatta: *Dviśatī*.⁶⁰⁷

MAṆIVEṆA: *Bālagrahacikitsā*.⁶⁰⁸

MANU, son of Lakṣmaṇa: *Vaidyasarvasva*, a collection of 117 prescriptions.⁶⁰⁹

MĀRGASAHĀYA: *Bhaiṣajyasāranighaṇṭu*.⁶¹⁰

MATHANASIMHA VAIDYA or VAIDYAMATHANASIMHA: *Trayodaśasaṃnipātānām cikitsā*, a work in fifty-four verses, dealing with the diagnosis and treatment of thirteen saṃnipāta fevers. The names of twelve of these fevers are: sandhiga, antaka, rugdāhaka, cittabhrama, śītāṅga, tandrika, kaṇṭhakubja, hāridraka, bhagnanetra,⁶¹¹ raktaṣṭhīvin, jihvaka, and abhinyāsa. Two additional chapters on saṃnipāta fevers and their treatment occur at the end of the tract: guṭikādhikāra and saṃnipātakalikā.⁶¹²

This text is related to the *Samnipātakalikā* attributed to Dhanvantari and that which forms part of the *Aśvinikumārasaṃhitā*.⁶¹³

MATHURĀNĀTHA ŚUKLA: *Vaidyāmṛtalahari*.⁶¹⁴

MĀYAṆA: *Bheṣajakalpa*.⁶¹⁵

MUDGALA: *Dravyaratnākara*.⁶¹⁶

MUḌUMBAI RĀGHAVĀCĀRYA, of Śrīvatsagotra: *Cikitsāsārasaṃgraha*.⁶¹⁷

NĀGADEVA: *Paryāyamañjarī*.⁶¹⁸

NAMAḤŚIVĀYA PAṆḌITA, pupil of Pūrṇānanda: *Vaidyapūrvakhaṇḍa*.⁶¹⁹

NANDIKĒŚVARA: *Netraprakāśikā*, a work on eye diseases, in the form of a dialogue between Pūjyapāda as the teacher and Hayagrīva as the pupil.⁶²⁰ The colophon gives the impression that it formed part of a larger work, called *Āyurveda*, composed as a conversation between Umā and Maheśvara.⁶²¹

NAṆJARĀJA BHŪPĀLA: *Vaidyasārasaṃgraha*.⁶²² This work may be the same as the *Vaidyasārasaṃgraha* of Narasiṃhaśāstrin.⁶²³

NĀRADA: *Sphoṭikāvidya*, a treatise in three chapters, in the form of a dialogue between Āstika and Gautama, on the treatment of sphoṭikās.⁶²⁴

NARASIṂHA: *Guṇasārasamuccaya*.⁶²⁵

NARAVATA(?): *Kāṅkāyanavatikā*.⁶²⁶

NĀRĀYAṆA: *Jyotsnikā*.⁶²⁷

NĀRĀYAṆA: *Nārāyaṇāvalokana*, a medical work on karmavipākā.⁶²⁸

NĀRĀYAṆA: *Nārāyaṇavāṭīpāṭha*.⁶²⁹

NĀRĀYAṆA: *Ratnamālādhyāya*, a medical vocabulary.⁶³⁰

The *Tantrasārasaṃgraha*⁶³¹ by NĀRĀYAṆA⁶³² is a Tantric text, also called *Nārāyaṇīya Sarvamantrārthakośa*,⁶³³ that deals with medicine in some of its chapters.⁶³⁴ In Kerala it is known as *Viṣanārāyaṇīya*,⁶³⁵ in order to distinguish it from *Nārāyaṇabhaṭṭatīpāda*'s *Nārāyaṇīya*, which is a well-known Bhāgavata work, very popular in that country.⁶³⁶

The treatise contains 2,069 verses, arranged in thirty-two chapters (paṭala).⁶³⁷ It is called a *ṣaṭkarmikatatānta*,⁶³⁸ which explains that six Tantric subjects are covered:⁶³⁹ *viṣa*, i.e., toxicology (chapters one to ten), *grahas* and *unmāda* (chapters eleven to fourteen), *āmayadhvamsa* and *auśadha*, i.e., the treatment of various diseases (chapters fifteen and sixteen), the types of magic called *ksudra*⁶⁴⁰ (chapters seventeen and eighteen),⁶⁴¹ the conjuring art called *narman* or *vinoda*, i.e., illusionism (chapter nineteen), and, finally, *kāmika*, i.e., devotion to Tantric deities and its results (chapters twenty to thirty-two).⁶⁴²

The first ten chapters are mainly on animal poisons: (1) introductory matter, (2) the origin of snakes and their typology, (3–5) the treatment of snake-bites with mantras, etc., (6) the medical treatment of the bites of darvikara snakes, (7) the bites of gonasa snakes⁶⁴³ and their treatment, (8) the bites of rājila snakes and their treatment, (9) rat-bites and their treatment, (10) the bites of spiders, scorpions, rabid dogs, etc., together with their treatment, remedial measures against poisons of animal and vegetable origin, and drugs which neutralize other drugs (*pratyaūśadha*).⁶⁴⁴

Chapters eleven to sixteen deal with: (11) *bālagrahas* (three series are mentioned,

attacking the child on the first to tenth day, first to twelfth month, and second to seventeenth year of life).⁶⁴⁵ (12) *unmāda*, i.e., insanity, caused by bodily disorders or by *grahas*, (13) measures against disorders caused by *grahas*, (14) the treatment of *unmāda*, (15–16) the treatment of various diseases.

Chapters seventeen to twenty-seven are not relevant to medicine. Chapter twenty-eight (*vaśyapaṭala*) contains various measures which affect the sexual functions of men and women; chapter twenty-nine (*strīpaṭala*) contains matter pertaining to obstetrics and gynaecology; chapter thirty (*gavādīpaṭala*) is about diseases in various domestic animals and other subjects; chapter thirty-one (*yuddhādīpaṭala*) is concerned with ariṣṭas and warfare. The concluding chapter (*hariharapūjādīpaṭala*) is devoid of medical interest.

The author refers to only one of his sources, namely the *Śikhāyoga*.⁶⁴⁶

The *Tantrasārasaṃgraha* is quoted by Anantakumāra⁶⁴⁷ and Īśānaśivagurudeva under the title *Nārāyaṇīya*.⁶⁴⁸ The *Bhesajjamañjūsāsannaya* cites it as *Tantrasārasaṃgraha* and *Nārāyaṇīya*.

Eighteen mahāgrahas are described, together with the symptoms they bring about in their victims: *amṛta* or *sura*, *asura*, *nāga*, *yakṣa*, *gandharva*, *rākṣasa*, *medhra*, *kaśmala*,⁶⁴⁹ *nistejas*,⁶⁵⁰ *bhasmaka*, *pitar*, *kuśa*, *vināyaka*, *pralāpa*, *piśāca*, *antyaḥ*, *yonija*, and *bhūta*; to these are added nine *grahas*: *apasmāra*, *dvija*, *brahmarākṣasa*, *avanibhuja* or *nṛpa*, *viś*, *vṛṣala*, *nīca*, *caṇḍāla*, and *vyantara*. The *grahas* are also divided into the categories *balikāma*, *ratikāma* and *hantukāma*.⁶⁵¹

A disease of the ears, called *jhiṇikā*, is once mentioned (15.58), and also a type of *arśas* localized on the scalp (*kapālārśas*, 16.22). The disease called *māri* (15.51) is probably the same as *masūrikā* (15.52). The commentator explains *ślīpāda* as *pādavalīmika* (ad 16.46).

Interesting names of medicinal plants are: *ajjhaṭā* (8.41; 15.41),⁶⁵² *alpmārīṣa* (6.54), *aśvinīvrkṣa* (17.73), *avitāna* (8.40; 10.24),⁶⁵³ *bāhuvallī* (6.15; 7.68),⁶⁵⁴ *dorvallī* (7.60 and 64; 8.41),⁶⁵⁵ *doṣā* (7.42 and 66; 9.72; 10.5 and 41),⁶⁵⁶ *gāyakī* (7.66),⁶⁵⁷ *ijhaṭā* (31.68), *jārī* (31.66), *kapoti* (7.56), *kāraskara* (10.45),⁶⁵⁸ *lakṣmī* (9.62; 29.23),⁶⁵⁹ *mohinī* (10.12; 20.32),⁶⁶⁰ *mūrdhapuṣpī* (7.66),⁶⁶¹ *nandyāvarta* (7.60; 21.9; 31.71),⁶⁶² *papphaṇa* (29.39), *phaṇṭaka* (30.4), *phirā* (9.51 and 52), *rājamohinī* (31.64), *sadābhadrā* (19.40), *sāgarairāṇḍa* (9.60),⁶⁶³ *samīrasakha* (6.59),⁶⁶⁴ *saṃmohinī* (31.73), *śauṇḍī* (8.38),⁶⁶⁵ *sitēhā* (10.15), *śophaghñī* (6.54 and 58),⁶⁶⁶ *sphoṭikā* (7.59), *śūlī* (8.32), *śyenā* (17.75),⁶⁶⁷ *taṭāka* (9.51),⁶⁶⁸ *tāpiccha* (9.36; 16.6),⁶⁶⁹ *triśūlī* (31.63), *tuṇḍī* (8.40; 9.43, 55 and 58; 16.22),⁶⁷⁰ *uttamā karnikā* (9.48),⁶⁷¹ *uttānaparṇī* (31.68), *vanakuṣṭha* (7.61), *vanāmbā* (7.61), *vega* (6.13),⁶⁷² *vijayarāga* (6.17), *viṣataru* (17.70 and 74),⁶⁷³ *vyāghāta* (9.33; 16.19), *vyāghātaka* (8.41),⁶⁷⁴ *yāmavati* (7.67),⁶⁷⁵ and *yāminī* (7.59 and 61; 10.39).⁶⁷⁶

Nārāyaṇa informs us⁶⁷⁷ that he was a son of Nārāyaṇa and Umā, and a brother of Gaurī; his maternal uncle was called *Parameśvara*. His family lived in Śivapura on the banks of the river Nīlā. He is reported to have acquired his knowledge of *mantrasāstra* through efforts to get rid of a disease which was either *kuṣṭha* or *pakṣavādha*. In Kerala he is regarded as the author of the *Lakṣaṇāmṛta*⁶⁷⁸ and other works on *agadatantra*.

The Nārāyaṇa who wrote the Bhāgavata work called *Nārāyaṇīya* should be distin-

guished from the author of the *Tantrasārasaṃgraha*. The former, a devotee of Kṛṣṇa, who lived in the village Navagrāma on the banks of the Nilā in the period 1550–1650, was called Nārāyaṇabhāṭṭatripāda.⁶⁷⁹

The *Tantrasārasaṃgraha* may be earlier than the *Īśānaśivagurudevapaddhati* (twelfth century),⁶⁸⁰ which borrows from and refers to it as *Nārāyaṇīya*,⁶⁸¹ The work precedes the *Bhesajjamañjūsāsanaya* (completed in A.D. 1734), and Anantakumāra's *Yogaratanasamuccaya*, which quote it.

Some scholars regard it as belonging to the sixteenth century.⁶⁸²

The commentary on the *Tantrasārasaṃgraha* was written by an unknown author, but it is sometimes, on insufficient grounds, ascribed to Nārāyaṇa himself.⁶⁸³ It was evidently composed in Southern India, since it gives the Tamil and Malayāḷam equivalents of many terms, especially of the names of plants and animals. In this respect it abounds in repetitions. Apart from that, it contains much interesting Tantric material. Quotations are nowhere referred to their sources.

NĀRĀYAṆAṆḌITA: *Vaidyaratnākara*.⁶⁸⁴

NĀRĀYAṆARĀJA: *Nārāyaṇavilāsa*.⁶⁸⁵ This work is one of the sources of the *Rasayogasāgara*.⁶⁸⁶

NĀTHAṆḌITA: *Aṣṭāṅgakāṇḍa*.⁶⁸⁷

NEMICANDRA: *Dravyasaṃgraha*.⁶⁸⁸

NĪLAKAṆṬHA was the author of the *Basavarājīya*⁶⁸⁹ or *Vṛṣarājīya*,⁶⁹⁰ an extensive medical treatise, divided into twenty-five chapters (*prakaraṇa*).

Chapter one: generalities, the examination of the pulse, fevers, krimiroga, jvarā-tisāra, atisāra; chapter two: samnipāta fevers; chapter three: the doṣas, the examination of the urine; chapter four: kṣaya and rājayakṣman; chapter five: pāṇḍuroga, halī-maka, śopha, kāmala; chapter six: vātavyādhī; chapter seven: twenty-four pitta diseases and chardi; chapter eight: kāsa, śvāsa, hikkā; chapter nine: meha, mehavraṇa, mūtrakṛcchra, mūtrāghāta, aśmarī.

Chapter ten: grahaṇī, atisāra; chapter eleven: udara, ānāha and udāvarta, vidradhi; chapter twelve: trṣṇā, dāha, hṛdroga, viṣūcī, alasaka, vilambikā, agnimāndya, ajīrṇa; chapter thirteen: kuṣṭha, visarpa, visphoṭaka; chapter fourteen: arśas, upadamśa, śū-kadoṣa, aṇḍavṛddhi; chapter fifteen: vandhyātva, ārtavadoṣa, garbhapāta, garbhaśūla, gudabhrāmśa, garbhīṇiroga, etc.; chapter sixteen: asṛgdara, kusumaroga, asthisrāva, yonivyāpāda, yonikanda, garbhapāta, mūḍhagarbha, sūtikāroga, stanaroga, somaroga, etc.; chapter seventeen: netraroga; chapter eighteen: medoroga, kārśya, madātyaya, nāsāroga, śīroroga; chapter nineteen: gulma, tūnī, pratitūnī, aṣṭhīlā, pratyāṣṭhīlā, śūla; chapter twenty: unmāda, apasmāra.

Chapter twenty-one: bhagandara, vraṇa, āgantukavraṇa, nāḍivraṇa, agnidagdha-vraṇa, lūtavraṇa, markāṭiroga, arbuda, galagaṇḍa, gaṇḍamālā, karṇaroga, mukharoga, tuṇḍivraṇa, kūpavraṇa, snāyukavraṇa, stanavraṇa, granthī, galakīlā, āśyasphoṭa, kīlaka, kīlasphoṭa, ślīpāda; chapter twenty-two: kṣudraroga, svarabhaṅga, vadana-

durgandha, kandubhedana, chāyāroga, arocaka; chapter twenty-three: viṣa; chapter twenty-four: karmavipāka; chapter twenty-five: alchemy.

The treatise ends with a list of diseases.

The *Basavarājīya* describes the aetiology, symptomatology and therapy of the diseases mentioned. The arrangement of the diseases is not in conformity with the *Mādhavanidāna*, nor with Vāgbhaṭa's order. The prescriptions are of both āyurvedic and iatrochemical types.⁶⁹¹

Some parts of the treatise are not in Sanskrit, but in Telugu.

Sources referred to or quoted are: *Agnimata* (1, 27,⁶⁹² 90, 387), *Agniveśa* (27), *Āśvina* (159), *Āśvinīkalpa* (58, 78, 83, 88, 90, 122, 126, 243, 250, 282, etc.), *Āśvinīnighaṇṭu* (22, 146),⁶⁹³ *Āśvinīya* (1, 11), *Āyurveda* (1, 8, 10, 11, 13, 15, 19, 21, 22, 24, etc.), *Bhairavakalpa* (1, 60, 89, 198, 205),⁶⁹⁴ *Bheṣajakalpa* (1, 13, 20, 32, 73, 227, 257, 270, 295, 362), *Brahmagāruḍa* (1, 362, 364),⁶⁹⁵ *Candrabhāṣya* (268),⁶⁹⁶ *Candrakalpa* (1),⁶⁹⁷ *Caraka* (1, 2, 18, 22, 30, 73, 74, 108, 118, 119, etc.),⁶⁹⁸ *Cikitsāsārasaṃgraha* (1, 90, 172), *Cikitsāsārasiddhasaṃgraha* (13, 129, 159, 177, 179, 189, 192, 195, 207, 226, etc.),⁶⁹⁹ *Cintāmaṇi* (1, 10, 27, 49, 50, 51, 52, 53, 54, 76, etc.), *Deviśāstra* (1, 77, 385, 400),⁷⁰⁰ *Hārīta* (27), *Hārītātreyakasamhitā* (11),⁷⁰¹ *Hemādri* (370), *Jātukakarnaka* (1), *Jātukarṇa* (190), *Jātukarṇanighaṇṭu* (85),⁷⁰² *jyotiḥśāstra* (366, 369, 370, 371, 372, 373, 374, 375), *jyotiṣa* (1, 58), *Karmakāṇḍa* (371),⁷⁰³ *Karmavipāka* (1, 72), *Karmavipākasamgraha* (368), *Kāśīkhaṇḍa* (1, 307), *Kaumudī* (109), *Lohatantra* (84), *Mādhavakalpa* (1, 59, 60, 70, 100, 123, 163, 171, 194, 201, etc.),⁷⁰⁴ *Mādhavanidāna* (very often),⁷⁰⁵ *Mādhavīya* (1, 194⁷⁰⁶), *Nandināthīya* (1, 165),⁷⁰⁷ *Nighaṇṭu* (387, 393, 396, 398, 401, 402, 403, 412, 415), *Nityanāthīya* (1, 23, 26, 27, 29, 30, 34, 35, 49, etc.), *Pārāśarya* (368), *Pārījāta* (109), *Pūjyapādīya* (1, 8, 21, 33, 41, 42, 60, 78, 81, 111, etc.), *Rasaratnākara* (27, 31, 32, 33, 34, 35, 81, 130, 143, 148, etc.), *Rasārṇava* (2), *Revaṇakalpaka* (1), *Revaṇasiddhabhāṣya* (64),⁷⁰⁸ *Śārīra* (70, 130, 132, 182, 185, 216, 222, 236, 237, 269, etc.), *Śārīranighaṇṭu* (82),⁷⁰⁹ *Śārīrasūtra* (sthāna) (1, 115), *Siddharasārṇava* (1, 8, 11, 18, 26, 28, 29, 31, 32, 38, etc.),⁷¹² *Siddhasaṃgraha* (73, 88, 131, 181, 196, 243),⁷¹³ *Siddhasārasaṃgraha* (178),⁷¹⁴ *Siddhavidyābhū* (1, 2, 8, 12, 16, 21, 33, 57, 58, 69, etc.),⁷¹⁵ *Sindūradarpaṇa* (1, 97),⁷¹⁶ *Sindūramaṇidarpaṇa* (31, 110, 127, 129, 133, 164, 180, 195, 222, 244, etc.),⁷¹⁷ *Sūrasūtra* (270),⁷¹⁸ *Sūtrasthāna* (83, 230), and Vāgbhaṭa or Vāhaṭa (1, 8, 10, 14, 15, 16, 17, 18, 19, 20, etc.).⁷¹⁹

To this list have to be added: *Cintāmaṇinighaṇṭu*,⁷²⁰ *Pūjyapādanighaṇṭu*, and *Sū-trarājyaratnākara*,⁷²¹ as well as *Rakṣākarmasūtra*,⁷²² *Rasahṛdayatantra*, *Rasendrasamhitā*, and *Suśruta*.⁷²³

The *Basavarājīya* is referred to in Gulrājśarmamiśra's *Siddhaprayogatikā*,⁷²⁴ it is quoted in the *Āyurvedīya Khanijavijñāna*, *Bheṣajasamhitā*, Hārīśaraṇānanda's *Kū-pīpakvarasanirmāṇavijñāna*, and Satyadeva Vāsiṣṭha's commentary on Rāvaṇa's *Nā-dīparikṣā*. *Basavarājīya* is one of the sources of the *Rasayogasāgara*.

Caraka is said to belong to the Kṛtayauga, the *Rasārṇava* to the Tretā-, the *Siddhavidyābhū* to the Dvāpara-, and the *Basavaka* to the Kaliyuga. The order of the diseases disagrees with the *Mādhavanidāna*, except in the chapter on karmavipāka (ch. 24). Dis-

eases described by Mādhava, but omitted by Basava in the main body of his work, are vātarakta, bhagna, masūrīkā, and bālaroga. The chapter on fevers (ch. 1), however, includes a masūrījvara; vātarakta is mentioned in the list of disorders at the end of the *Basavarājīya*. Completely absent are vardhma, phiraṅgaroga, and śītalā, but snāyuka and somaroga were known to Basava. The names of fever in various living beings and inanimate substances are enumerated (7). Unusual types of fever described are masūrījvara (11–12), śaktijvara (11), kālajvara (22), viṣūcikājvara (24), kāmālājvara (25), and sūtīkājvara (26). Ten stages (avasthā) of fever are mentioned (26).

Two series of thirteen samnipāta fevers are described. The first series consists of sandhika, tāndrika, pralāpa, cittavibhrama, jihvaka, karnika,⁷²⁵ rugdāha, antaka, bhugnanetra, kaṇṭhakubja, raktaṣṭhīvin, śītagātra, and abhinyāsa (50–54).⁷²⁶ Each member of this first series is characterized four times, according to the descriptions of the *Mādhavanidāna*,⁷²⁷ *Āyurveda*, *Nityanāthīya*, and *Cintāmaṇi*. The characterizations said to be from a treatise called *Āyurveda* are also found in the *Parahitasamhitā* and *Yogaratanā-kara*; the remaining ones are unknown from other texts.

The second series consists of visphāraka, āśukārīn,⁷²⁸ kampana, babhru, śīghrakārīn, bhalla, kūṭapālaka, saṃmohaka, pālaka, yāmya, krakaca, karkaṭaka, and vaidārika (54–57). The descriptions of these fevers are identical with those by Vaṅgasena and Bhāvamīśra.

Chapter two describes four abnormal colours of the tongue (59–60). Chapter six states at its beginning (92) that eighty disorders by vāta will be enumerated, but the list following this statement has only a number of seventy-one. This highly unusual list, which completely disagrees with the eighty vātavikāras of the *Carakasamhitā* and the vāta disorders of many medical treatises, mentions ūrdhvavāta,⁷²⁹ śīrovāta, pakṣāghāta, pārśvavāta, ardhāṅgavāta,⁷³⁰ kampavāta,⁷³¹ ūrustambha,⁷³² kikkasa,⁷³³ raktavāta,⁷³⁴ amlavāta, kaphavāta, sādhyavāta, dhanurvāta,⁷³⁵ timiravāta, kaṇṭhavāta, kākavāta, śītavāta, nayanavāta, udaravāta, nāsavāta, mukhavāta, avayavāṅgavāta, jihvāṅgavāta,⁷³⁶ naravāta, karnavāta, āmavāta,⁷³⁷ tvagvāta,⁷³⁸ aṇuvāta, āṅgavāta, bhramaṇavāta, malabaddha, gulmavāta, mūtrabaddha, bāhukampa, skandhavāta, mandavāta, jānuvāta, jāṅghavāta, pādavāta, kandharavāta, aṅgulivāta, anulomavāta, vilomavāta, suptavāta,⁷³⁹ koṣṭhavāta, bastivāta, śuṣkavāta, sthānavāta, kuṣṣivāta, asthivāta,⁷⁴⁰ majjāvāta,⁷⁴¹ ekāṅgavāta, kṣīṇavāta,⁷⁴² vasāvāta,⁷⁴³ madhuvāta, kṣudhāvāta, śrīṅkalavāta, sphoṭavātaka, snāyuvāta,⁷⁴⁴ prasūtivāta, ajīrṇavāta, ātapavāta, agnivāta, svarahīna, khañjaka, kalāvāta, daṇḍavāta,⁷⁴⁵ kṣatavāta, paṅguvāta,⁷⁴⁶ dadhivāta, and unmādvāta.

The vāta diseases characterized in chapter six are for the greater part, but in a different order, those enumerated in this list,⁷⁴⁷ but some of the latter are absent: naravāta, āṅgavāta, sthānavāta,⁷⁴⁸ and kṣudhāvāta. Vāta diseases described in chapter six, although absent from the list, are: dhūmavāta (93), vidhūmavāta (94), kṣutavāta (96), grdhrasivāta (97),⁷⁴⁹ pāmśuvāta (98), śuklavāta (98), bhogavāta (99), kaṭivāta (99),⁷⁵⁰ sirāvāta (101),⁷⁵¹ ādhyavāta (106),⁷⁵² sandhivāta (106),⁷⁵³ styānavāta (108), gulphavāta (108), ardita (111),⁷⁵⁴ badhiravāta (113), and orugavāta (114).⁷⁵⁵ At the end of chapter six, Basava gives a list and descriptions of vāta diseases according to another treatise. This second list includes a considerable part of the usually recognized

vāta disorders.⁷⁵⁶

A list of twenty-four pitta diseases, completely different from the forty pitta disorders of the *Carakasamhitā*, is found at the beginning of chapter seven. The list consists of avarṇa, vivarṇa, sūryavarṇa, kāmālā, āmla, rakta, sveda, unmatta, paṇḍra, sarpika, karapāda, śīta, mūrchā, madhuka, kusumaka, krodha, bhraṃśa, śīras, kṣudh, tṛṣṇā, durbhāva, carman, durgandha, and madana. The descriptions of the pitta diseases are largely in the same order: āvarṇapaittya, vivarṇapaittya, sūryavarṇa, kāmālā, amlapitta, svedapitta, unmādapaittya, paṇḍarika, karapāda, śītapitta, mūrchāpitta, madhupitta, kusumapitta (and nāsikākusuma = nosebleed), krodhapitta, bhraṃśapitta, śīrahpitta, kṣudhāpitta, tṛṣṇāpitta, durbhāvapitta, carmapitta, madanapitta, visarapitta,⁷⁵⁷ and raktapitta (as well as asṛgdara). The remaining part of the chapter is devoted to renewed descriptions of amlapitta and mūrchā.

Chapter eight, on cough (kāsa), describes at first five types of kāsa, in agreement with the *Mādhavanidāna*, followed by another list consisting of twenty varieties, which are subsequently characterized: pūrvakāsa, kṣayakāsa, raktakāsa, cippikākāsa, vātakāsa, pittakāsa, kṣatakāsa, śūktikākāsa, āmakāsa, pāṇḍukāsa, kṣṇakāsa, śleṣmakāsa, dadhikāsa, śleṣmajihvakakāsa, kaṇṭhajihvakakāsa, upajihvakakāsa, jihvakakāsa, ūrdhvakāsa, śleṣmabhaṅga or bhaṅgāliśleṣmaka, and kuṣṭhakāsa or śleṣmakuṣṭha.

Chapter twelve enumerates the symptoms of three doṣaja types of viṣūci and five complications of this disease (201). Chapter thirteen mentions kuṣṭha, jvara, śoṣa and netrābhiṣyanda as contagious diseases (aupasargikaroga; 211). Chapter fifteen refers to parasitic organisms in the uterus (241). Chapter sixteen describes the disease called asthīrāva (248). Chapter seventeen refers to a number of ninety-four eye diseases (259).⁷⁵⁸ Chapter twenty-one describes burns (agnidagdhavaraṇa; 321), lūtavaraṇa (322), and several varieties of a disease called markāṭiroga (323–325);⁷⁵⁹ the number of mukharogas is said to be sixty-four (334);⁷⁶⁰ some unusual mukharogas described are galagranthi (347), galakīla (347), and āśyasphoṭa (347–348); two other rarely mentioned disorders are kīlaka (348) and kālasphoṭa (348). Chapter twenty-one deals, among other things, with diseases called kandubhedana (361) and chāyāroga (361).⁷⁶¹

The author's name is Nīlakaṇṭhakōṭṭūru Basavarāja, son of Namaḥśivāya, who was a disciple of Rāmadeśika of the Nīdimāmiḍi family.⁷⁶² He calls himself the moon of the Nīlakaṇṭha family⁷⁶³ and belonged to the Vīraśaiva sect.⁷⁶⁴ The name of his guru may have been Jaṅgameśa.⁷⁶⁵ The *Basavarājīya* is especially popular among the vaidyas of Āndhra Pradesh.⁷⁶⁶

It is difficult to establish an exact date of the *Basavarājīya*. The developed state of nāḍīparīkṣā and rasaśāstra, and the quotation from Hemādri, indicate that it cannot be earlier than the fourteenth century. The prescription of rasakarpūra,⁷⁶⁷ although not yet against phiraṅgaroga, points to the sixteenth century as the period of its composition. This is confirmed by the presence of China root⁷⁶⁸ in the prescriptions against venereal diseases.⁷⁶⁹

NĪLAKAṆṬHA: *Nīlakaṇṭhasaṃgraha*, a work on pathology and therapy, containing numerous prescriptions with special names. This treatise is sometimes characterized as a physician's vademecum. Caraka is quoted with preference, and Mādhava is followed

in the arrangement of the diseases. General subjects and religious therapy are also dealt with.

Nilakanṭha was a son of Narahari and Sāvitrī and belonged to the Vaidya caste. His uncle was Śrīdhara of Dhanvantarigotra; one of his more remote ancestors was Tripurāridhana, a mahopādhyāya.⁷⁷⁰

NILAKAṆṬHAMĪŚRA: *Paryāyārṇava*, a medical lexicon in five chapters (tarāṅga).⁷⁷¹

NITYANĀTHA, Śrīnātha or Nāgabhaṭṭa was the author of the *Kāmaratna*,⁷⁷² a popular Tantric treatise⁷⁷³ on ṣaṭkarman and other types of magic.

The work⁷⁷⁴ consists of about 1,400 verses,⁷⁷⁵ arranged in sixteen chapters.⁷⁷⁶ Some of the subjects are: vaśīkaraṇa (subjugation; 1.38–107),⁷⁷⁷ ākarṣaṇa (attraction; 2.1–16),⁷⁷⁸ jaya (victory over adversaries; 3.1–19), stambhana (immobilization; 4.1–82),⁷⁷⁹ mohana (delusion; 5.1–17), rañjana (pleasing; 5.18–94), vājīkaraṇa (aphrodisiacs; 6.1–91),⁷⁸⁰ uccāṭana (eradication; 10.1–15), vidveṣaṇa (sowing dissension; 10.16–22),⁷⁸¹ māraṇa (killing; 10.42–59), kautuka (awesome feats; 11.1–36),⁷⁸² kāmvasiddhi (procuring desired ends; 12.1–113), yakṣiṇīsādhana (propitiation of yakṣiṇīs; 15.1–51).⁷⁸³

Subjects more or less related to medicine are: delaying or preventing ejaculation (śukrastambhana; 4.44–82),⁷⁸⁴ the prevention of a foul smell and sweating (5.19–31), the treatment of disorders of the skin, especially those affecting the face (pitakā, nilī, vyaṅga, tilakāla, śyāmikā; 5.42–56),⁷⁸⁵ recipes against lice and nits (5.98–105)⁷⁸⁶ and against premature baldness (indralupta; 5.106–117), aphrodisiacs (vājīkaraṇa; 6.1–91), tightening the vagina (gādhīkaraṇa; 7.1–10),⁷⁸⁷ increasing the size of the male organ⁷⁸⁸ and promoting erection (kāmadhvajasthūlīkaraṇa; 7.33–54), increasing the size and firmness of the female breasts (stanavardhana; 7.55–71),⁷⁸⁹ removal of the pubic hair in women (lomaśātana; 7.74–86),⁷⁹⁰ bringing about impotence (saṇḍhīkaraṇa; 8.1–9),⁷⁹¹ curing impotence caused by ill-disposed women (duṣṭaśrīkṛtadhvajapātōthāpana; 8.10–13), making the female organs inaccessible to another male (yonibandhana; 8.14–24),⁷⁹² bringing about menstruation (puṣpakaraṇa; 8.26–31),⁷⁹³ bringing about miscarriage (garbhapātana; 8.33–40),⁷⁹⁴ stopping menorrhagia and metrorrhagia (pradara; 8.41–58), the treatment of sterility in women (janmavandhyācikitsā; 8.60–93),⁷⁹⁵ the treatment of sterility subsequent to the birth of the first child (kākavandhyācikitsā; 8.94–98),⁷⁹⁶ the treatment of women whose children die at an early age (mṛtavatsācikitsā; 8.99–112),⁷⁹⁷ measures protecting the unborn child (garbharakṣā; 8.120–140),⁷⁹⁸ the treatment of disorders in pregnant women (sāmānyācikitsā; 8.141–158),⁷⁹⁹ measures securing an easy delivery (sukhaprasava; 8.160–164),⁸⁰⁰ measures against bālagrahas (8.165–180),⁸⁰¹ the therapy of the children's disease called ahitūṇḍikā (8.181–183),⁸⁰² bringing about sleep (nidrākaraṇa; 9.20–24) or sleeplessness (nidrānāśana; 9.25–28),⁸⁰³ causing diseases to appear (vyādhīkaraṇa; 10.23–33),⁸⁰⁴ causing insanity (unmattīkaraṇa; 10.36–41), recipes against diseases of eyes, ears, teeth, etc. (12.51–93),⁸⁰⁵ allaying hunger and thirst (12.98–105). Chapter fourteen is about vegetable (1–23) and animal poisons (24–152), upaviṣas (153–155), factitious poisons (156–166), poisons arising

when substances are mixed (167–171), and the poisonous substance in bhāllātaka oil (172–173). Chapter fifteen is concerned with the purification of mercury (1–41), cinnabar (hīṅgula; 42), sulphur (43–47), mica (48–65), and other, mostly inorganic, substances.

Authorities to whom recipes are attributed are: Bhojarāja (5.26), Bhūpati (8.159), Cakradatta (7.58), the author of the *Haramekhālā* (8.21), Kavipuṅgava (8.187), Mahādeva (13.66), Mūladeva (7.6; 8.28 and 142), Nāgārjuna (4.42 and 66),⁸⁰⁶ Nārada (6.37), Nityanātha (6.78), Rantideva (5.45; 7.10),⁸⁰⁷ Śambhu (13.16), Śiva (13.19; 14.126), Vātsyāyana (1.106), and Viśvāmitra (1.62). The *Vīratāntra* is the only work quoted by name (10.14–15).⁸⁰⁸

Nityanātha's *Kāmaratna* is mentioned among the sources of the *Rasayogasāgara*.⁸⁰⁹ The *Kāmaratna* is one of the sources of a *Kautukasāroddhāra*.⁸¹⁰ The work is quoted in the *Pāradasamhitā* and *Rasatattvavivecana*. It is referred to in Khare's commentary on the *Rasaratnasamuccaya*.

The *Kāmaratna* has many verses in common with the *Kakṣapuṭa*.⁸¹¹

Premature baldness (indralupta) goes under the name of vāyukṣīroṭaka (5.113).

Noteworthy names of plants are: añkulī (4.5), bhaṭikā (4.78), daṇḍā (8.9),⁸¹² karkaśā (6.55), keśarāja (5.3),⁸¹³ mahākālā (4.79; 5.81),⁸¹⁴ methī (6.30 and 74), munikhaṇḍakaśāka (9.23), peṭārikā (8.49),⁸¹⁵ raktāgastya (6.43), sitapikataru (6.6),⁸¹⁶ śubhā (5.9),⁸¹⁷ śvetabandhūka (4.76), śvetānyapuṣṭākhyataru (4.53), śvetapikākṣa (4.52), trailokyaviṣayā (i.e., bhaṅgā; 6.28), triśūlī (3.26), and triśūlinī (14.59).

Since Bhojarāja, Cakradatta, and the author of the *Haramekhālā* are referred to, the work cannot be earlier than about A.D. 1100.

NITYANĀTHASIDDHA: *Vandhyāvalī*.⁸¹⁸

NRHARI: *Takrapānavidhi*.⁸¹⁹

NRŚIMHA: *Nṛsimhanidāna*.⁸²⁰ The author mentions aṣṭasthānaparīkṣā and begins his work with nāḍīparīkṣā. The first chapter is called aśtīvātavyādhinidāna; Nityānanda is referred to in its colophon. At the end, Nṛsimha describes many diseases as persons forming part of the court of their king, Kṣaya. His queen is Sukāmilā, his general (camūpati) Pāṇḍuroga, his sons are the several forms of Raktapitta, his companions are Śopha and Atisāra, his two ministers Śvāsa and Kāsa, his spies Vāta and Pitta, his horses Vāntika and Aruci, his singers and musicians Grahaṇī, Arśas, Gulma, and Śūla.⁸²¹

NRŚIMHABHAṬṬA: *Tāmbūlakalpasamgraha*. This work on betel chewing quotes the following authors and works: Āśvalāyanācārya, Atri, Bharadvāja, Dakṣa, Devala, Hemādri, Kātyāyana's *Smṛticandrikā*,⁸²² *Mārkaṇḍeyapurāṇa*, *Samgraha*, *Śātātapa*, *Smṛtimañjarī*,⁸²³ Vaidya, Vasiṣṭha, *Vijñāneśvarīya* (i.e., the *Mitākṣarā* on the *Yājñavalkyasmṛti*), *Vṛddhavasīṣṭha*, and Vyāsa.

The reference to Hemādri establishes that the work cannot be dated earlier than the fourteenth century.⁸²⁴

NR̥SIMHAPAN̥DITA KĀSMĪRA: *Guṇasārasamuccaya*.⁸²⁵
 NR̥SIMHA SŪRI: *Vaidyasārasaṃgraha*.⁸²⁶
 PADMANĀBHA: *Cikitsāsamgraha*.⁸²⁷

PĀNAKĀLARĀYA: *Netradarpanamu*, a treatise on eye diseases and their treatment, written in Telugu and dating from the sixteenth century.⁸²⁸

This work distinguishes ninety-six eye diseases. Those mentioned are:⁸²⁹ four types of *kāca* (red, white, black, yellow), *śvetapaṭala*, *raktapaṭala*, *pīṭapaṭala*, *kṛṣṇapaṭala*, *divāṇḍha*,⁸³⁰ *timira*, *netrapuṣpa*, *niśāṇḍha*,⁸³¹ *jalasrāva*, *atisrāva*, *durmāṃsa*, *netravāta*, *netragandhi*, *netradāha*, *netraśoṭha*, *netraśūla*, *netralūṭikā*, *kṛṣṇapilla*, *śuklapilla*, *raktapilla*, *netrakāya*, *raktagrān̥thi*, *netrabudbuda*, *netrasūksmacalana*, *netracalana*, *catvāri*, *netrabandha*, *netrabhagna*, *netrajāra*, *netramālinya*, *netrārśas*, *netrabhramaṇa*, *netraniścita*, *netrakhaṇḍa*, *dvinetra*, *ūrdhvadr̥ṣṭi*, *netrāgni*, *adhodr̥ṣṭi*, *netrapūya*, *netrakuṣṭha*, *netrapāta*, *netronmīlana*, *netranimīlana*, *netrārdhadr̥ṣṭi*, *netramala*, *netragurtana*, *mandadr̥ṣṭi*, *śuklapuṣpa*, *raktapuṣpa*, *kṛṣṇamaṇḍala*, *agnigrān̥thi*, *netrātimala*, *pīṭapuṣpa*, *pakṣāghāta*, *pakṣaśūla*, *netravalmīka*, *pakṣadāha*, *pakṣapakṣman*, *pakṣaśobha*, *pakṣacalana*, *pakṣāticalana*, *pakṣajāta*, *padmakāya*, *padmakhaṇḍa*, *padmārbuda*, *jalasrāva* (mentioned for the second time), *netrapārśvaśūla*, *netrapārśva*, *netrapārśvakaṇḍūti*, *netrapārśvacāñcalya*, *netrapārśvaśobha*, *netraśaraṇa*, *netrarodha*, *netrapārśvarakta*, *netravilokana*, *netraphalla*, *netrasphoṭaka*, *netragādhāgni*, *duḥkhanetra*, *netrapuṣpa*, *pakṣadurmāṃsa*, *netrapipīlikā*, *durmāṇḍha*, *netradurmāṃsa*, *vātābhiṣyanda*, *netrātiroma*, *kaphābhiṣyanda*, *raktābhiṣyanda*, and *pittābhiṣyanda*.⁸³²

Thirty-five different ointments are described.

Spectacles were known to the author.

PARAMĀNANDA: *Bālacikitsā*.⁸³³

PARAMĀNANDA, son of Balabhadra: *Paramānandavilāsa*.⁸³⁴

PARAMĀNANDA: *Svarodaya*.⁸³⁵

PARAMĀNANDA MĪSRA, son of Narottama Mīśra: *Siddhāntadīpa*.⁸³⁶

PARAMEŚVARARAKṢITA: *Gaṇādhyāya*, on the classification of medicines.⁸³⁷

PĀRŚVADEVA: *Sukarayogaratnāvalī*.⁸³⁸

PĀRVATĪNĀTHA: *Paryāyamuktāvalī*.⁸³⁹

PERANA: *Vaidyasāramu*, a work in Telugu, containing many prescriptions and procedures popular in Āndhra, and written on the lines of the *siddhakriyās* of the Navanātha Siddhas; it may date from about A.D. 1600.⁸⁴⁰

PRĀNANĀTHA, son of Kātyāyana Bhaṭṭa: *Bhaiṣajyasārāmṛtasamhitā*.⁸⁴¹

PRAYĀGA: *Prayāgasamgraha*.⁸⁴²

PRĪTIRĀMASENA: *Sāratilaka*, a work on fevers.⁸⁴³

PŪJYAPĀDA⁸⁴⁴ is credited with:⁸⁴⁵ (1) *Auśadhayogagrān̥tha*;⁸⁴⁶ (2) *Bālagrahaśānti*;⁸⁴⁷ (3) *Bhaiṣajyaguṇārn̥ava*;⁸⁴⁸ (4) *Cikitsāviśaya*;⁸⁴⁹ (5) *Kalyāṇakāraka*;⁸⁵⁰ (6) *Madanakāmaratna*;⁸⁵¹ (7) *Madanasnuhīrasāyana*;⁸⁵² (8) *Mahāpūrṇacandrodya*;⁸⁵³ (9) *Nāḍi-*

parikṣā;⁸⁵⁴ (10) *Nidānamuktāvalī*;⁸⁵⁵ or *Siddhāntibhāṣya*;⁸⁵⁶ (11) *Pūjyapādavaidyaka*;⁸⁵⁷ (12) *Rasaratnākara*;⁸⁵⁷ (13) *Rasatantra*;⁸⁵⁸ (13) *Ratnākārādyauśadhayogagrān̥tha*;⁸⁵⁸ (14) *Rudantyaḍikalpa*;⁸⁵⁹ (15) *Surasasaṃgraha*;⁸⁶⁰ (16) *Śūlakūṭhāryauśadhavidhi*;⁸⁶¹ (17) *Vaidyakagrān̥tha* or *-śāstra*;⁸⁶² (18) *Vaidyakayogasamgraha*, *Vaidyasāra* or *-sārasaṃgraha*;⁸⁶³ (19) *Vaidyavidhāna*;⁸⁶⁴ (20) *Vidyāvinoda*;⁸⁶⁵ (21) *Vīryavṛddhyauśadhavidhāna*.⁸⁶⁶

A *Pūjyapādanighaṇṭu* is quoted in Basavarāja's *Basavatantra*.⁸⁶⁷ A *Samādhiśataka* by Pūjyapāda(?) is also recorded.⁸⁶⁸ Gommatadeva refers in his *Merutantra* to a *Vaidyāmṛta* by Pūjyapāda.⁸⁶⁹ A *Netraprakāśikā* in the form of a dialogue between Hayagrīva and Pūjyapāda is also known.⁸⁷⁰

A number of the mentioned works are sometimes ascribed to Devacandra:⁸⁷¹ *Bhaiṣajyaguṇārn̥ava*,⁸⁷² *Madanakāmaratna*,⁸⁷³ *Nidānamuktāvalī*,⁸⁷⁴ *Ratnākārādyauśadhayogagrān̥tha*,⁸⁷⁵ and *Rudantyaḍikalpa*.⁸⁷⁶

Formulae attributed to Pūjyapāda are found in many medical treatises, e.g., in an *Auśadhayogagrān̥tha*,⁸⁷⁷ the *Āyurvedasaukhyā* of Toḍara, the *Basavarājīya*,⁸⁷⁸ the *Bṛhannighaṇṭurātṇākara*,⁸⁷⁹ the *Cikitsāsāra* of Gopāladāsa,⁸⁸⁰ the *Rasapārījāta*,⁸⁸¹ the *Rasapradīpa* of Prāṇanātha,⁸⁸² a *Rasaratnākara*,⁸⁸³ the *Rasaratnakaumudī*,⁸⁸⁴ the *Ratnākaraśauśadhayoga*,⁸⁸⁵ a *Rudantyaḍikalpa*,⁸⁸⁶ the *Sahasrayoga*,⁸⁸⁷ the *Tailaprayoga*,⁸⁸⁸ the *Vāhaṭa* (or *Bāhaṭa*) by Gaurīputrakārtikeya,⁸⁸⁹ the *Vaidyacināmāṇi*,⁸⁹⁰ and the *Yogarātṇākara*.⁸⁹¹

Some of Pūjyapāda's prescriptions were couched in a style, peculiar to Jain medical works.⁸⁹²

References to Pūjyapāda as a medical author occur in the *Jñānārṇava* of Śubhacandra,⁸⁹³ the *Khagendramanidarpaṇa*,⁸⁹⁴ Khare's commentary on the *Rasaratnasamuccaya*, the *Pārśvapūrāṇa* by Pārśvapaṇḍita,⁸⁹⁵ the *Rasapradīpa*,⁸⁹⁶ the *Rasaratnasamuccaya*,⁸⁹⁷ the *Vaidyāśāstrapravartakācāryanāmasamuccaya*, Akalaṅka's *Vidyāvinoda*,⁸⁹⁸ and in an inscription.⁸⁹⁹

Pūjyapāda is mentioned as a Mahāsiddha in the *Haṭhayogapradīpikā* (1.7) and as a Rasasiddha in Caturbhujā's commentary on the *Rasahr̥daya* (1.7). Pūjyapāda's fame as a medical expert has remained alive until recent times.⁹⁰⁰

Opinions differ with regard to the identity of Pūjyapāda, author of the *Sarvārthasiddhi*, the *Jainendra* grammar, etc., with the medical author of the same name.⁹⁰¹ The former is dated to the first half of the fifth century,⁹⁰² latter half of the fifth century,⁹⁰³ the period A.D. 464–524,⁹⁰⁴ or about A.D. 700.⁹⁰⁵ The medical author is sometimes placed in the thirteenth century.⁹⁰⁶ His date is difficult to establish, but he is earlier than the *Khagendramanidarpaṇa* (A.D. 1360), which quotes him.

PŪRṆASETŪTTAMASŪRI: *Vṛddhyogaśataka* or *Vaidyavallabha*.⁹⁰⁷

PURUṢOTTAMA, pupil of Nīlakaṇṭha: *Bheṣajapaddhati*.⁹⁰⁸

PURUṢOTTAMA: *Vaidyakaśāra*.⁹⁰⁹

PURUṢOTTAMA, son of Jñānakara, grandson of Śaṃkara: *Yaśaścandrikā*.⁹¹⁰

PURUṢOTTAMADATTA: *Yogarātṇasaṃgraha*.⁹¹¹

PURUṢOTTAMAPREṢṬHA: *Puruṣottamatarka*.⁹¹²

RĀDHĀKRṢṢA: (1) *Kośasaṃgraha*; ⁹¹³ (2) *Nighaṇṭu*; ⁹¹⁴ or *Nighaṇṭusārasaṃgraha*; ⁹¹⁵ (3) *Oṣadhināmāvalī*, names of medicinal plants in alphabetical order. ⁹¹⁶

RĀDHĀMĀDHAVA: (*Cikitsā*)*ratnāvalī*. ⁹¹⁷

RAGHUDEVA: *Pathyāpathyanirṇaya*. ⁹¹⁸

RAGHUNANDANA: *Mugdhabodha*. ⁹¹⁹

RAGHUNĀTHA from Mathurā: (1) *Āryadeśamāgadhamāthurakṣatriyabhiṣagraghunāthanāmāmnāya*; this work, lost in the original Sanskrit, forms part of the Tibetan Tanjur under the title of *Hphags-yul dbus-hgyur ma-thu-raḥi rgyal-rigs-kyi sman-pa Ra-ghu-nā-thaḥi gdams-pa*; ⁹²⁰ (2) *Atigambhīropadeśagaṇāḥ*; this short treatise deals with the treatment by means of mantras of disorders caused by grahas; it is preserved in a Tibetan translation with the title of *Śin-tu zab-paḥi man-nag-gi ḥhogs-rnams*; the tract was collected by the Tibetan physician Dar-mo sman-rams-pa ⁹²¹ and translated in the Potala by Lhun-grub. ⁹²²

RAGHUNĀTHADĀSA: *Dīpikā*. ⁹²³

RAGHUNĀTHAMIŚRA: *Sārasaṃgraha*. ⁹²⁴

RAGHUNĀTHA NARAHARI JYOTIŚĪ: *Anupānamañjarī*. ⁹²⁵

RAGHUNĀTHAPRASĀDA: ⁹²⁶ (1) *Caryāpadmākara*; ⁹²⁷ (2) *Vaidyakalpadruma*; ⁹²⁸ (3) *Vājīkaraṇakalpadruma*. ⁹²⁹

RAGHUNĀYAKA: *Nighaṇṭusāra*. ⁹³⁰

RĀJENDRA: *Aṣṭāṅgaśuddhi*. ⁹³¹

RĀMA: *Yogarātnāvalī*. ⁹³²

RĀMACANDRA, of the Guha family: *Cakradattanāmakagrantha*. ⁹³³

RĀMACANDRA, son of Prabhākara: *Indrakośa* or *Rājendrakośa*, written at the request of Indrasimha, king of Gauḍa. ⁹³⁴

RĀMACANDRA: (1) *Vaidyacintāmaṇi*; ⁹³⁵ (2) *Vaidyakalpadruma*. ⁹³⁶

RĀMACANDRA: *Kriyāvidhi*. ⁹³⁷

RĀMACANDRA: *Rāmācandrikā*. ⁹³⁸

RĀMADĀSA, pupil of Bhavānīprasāda: *Śarīraṇiścayādhikāra*. ⁹³⁹

RĀMAKRṢṢA: *Vaidyaratnākaraḥṣya*. ⁹⁴⁰

RĀMAKRṢṢABHIṢA: *Dravyapradīpa*. ⁹⁴¹

RĀMALOCANAŚARMA: *Kālanirṇaya*. ⁹⁴²

RĀMĀNANDADVIJA: *Cikitsāsārasaṃgraha*. ⁹⁴³

RĀMĀNANDANĀTHA: *Auśadhālaṃkāra*, in Sanskrit and Marāṭhī. This work forms chapter six of part three of the author's *Mahāvaidyabhūṣaṇa*; its material is drawn from *Madanapāla*-, *Dhanvantarīya*-, and *Rājanighaṇṭu*. ⁹⁴⁴

RĀMĀNANDAPANDITA: *Ārogyakalpadruma*. ⁹⁴⁵

RĀMANĀRĀYAṆA KANṬHAHĀRA: *Yogapradīpa*. ⁹⁴⁶

RĀMANĀTHA: *Yogamahārṇava*. ⁹⁴⁷ This work is quoted in Hariśaraṇānanda's *Kūpī-pakvarasanirmānavijñāna*; it is one of the sources of the *Rasayogasāgara*. ⁹⁴⁸

RĀMĀNUJA: *Bhaumāṃṭa*. ⁹⁴⁹

RĀMĀNUJA YATIVARA: *Vaidyaratnāvalī*. ⁹⁵⁰

RĀMEŚVARA, pupil of Cintāmaṇi: *Sadyogacintāmaṇi*. ⁹⁵¹

RĀMEŚVARA: *Vaidyasarvasvasaṃgraha*. ⁹⁵²

RĀVAṆA: *Arkaprakāśa*, ⁹⁵³ a monograph on pharmaceutical preparations of the type called arka. ⁹⁵⁴

The *Arkaprakāśa*, ⁹⁵⁵ consisting of 985 verses ⁹⁵⁶ which are arranged in ten chapters (śataka), has been composed in the form of a dialogue between Rāvaṇa and his wife Mandodarī, who is with child. Mandodarī asks her husband to explain to her the means by which she will remain free from pain, and which will make her child thrive. Rāvaṇa then proceeds to pass on to her the knowledge he received from Pārvaṭī (1.1–16). ⁹⁵⁷ Nonetheless, the *Arkaprakāśa* is not predominantly concerned with kaumārābhṛtya.

Chapter one deals, after the sixteen verses of the introduction, with the classification of medicinal plants (1.17–19) and the parts of these to be used (1.20–22); the basic concepts of pharmacology (1.23–45); five types of pharmaceutical preparation: kalka, cūrṇa, rasa, taila, and arka; of these, kalka has the weakest, arka the strongest action (1.46–49). The remaining part of chapter one is concerned with the yantra to be employed in the preparation of an arka (1.52–60), the cup for the ingestion of an arka (bhojanapātra; 1.61–69), the characteristics of a well-prepared arka (1.74–75), the way of ingesting it (1.79), the six types of fire used in preparing an arka (1.80–85), the characteristics of the messenger sent to the physician (1.92–94), the description of a rogoddhārācakra (1.95–96), ⁹⁵⁸ and related subjects.

Chapter two deals with the five types of substances from which an arka can be extracted (2.1–37); removing a foul smell from an arka and conferring fragrant upon it (2.38–57); arkas made from meat (2.58–71); the preparation of mineral acids (2.72–80); different kinds of meat (2.81–83); the preparation of alcoholic beverages (2.84–97); ⁹⁵⁹ the preparation of an arka from hemp (bhaṅgā) and thornapple seeds (dhattūrābīja; 2.98–99). Chapter three describes arkas from simples (kevalārka) and their effects. Chapter four is about groups of substances and their medicinal uses; animals are classified, and arkas prepared from their flesh described as remedial agents; at the end of the chapter (4.96), an arka prepared from human flesh is praised as a very potent agent against poison. ⁹⁶⁰ Chapters five, six, and seven are about arkas to be prescribed against various diseases, which are, in broad outline, arranged in the same order as in the *Mādhavanidāna*. The second part of chapter six is devoted to the goddess Śītālā and the disease of that name. The contents of chapter eight are of a magical character; it is concerned with subjects like vaśīkaraṇa, vidveṣaṇa, uccāṭana, māraṇa, mohana, etc. ⁹⁶¹ Chapter nine is about gaṇas (groups of substances, plants, and animals), and chapter ten

about subjects connected with alchemy.

Sources are not indicated in the *Arkaprakāśa*. The ingredients of some of the arkas described are strikingly similar to those of compound medicines found in the *Cakradatta*.⁹⁶²

The *Arkaprakāśa* is quoted in the *Āyurvedīya Khanijavijñāna*, by Kāñcīnātha in his commentary on the *Ratirahasya*,⁹⁶³ and in Nirāñjanaprasāda Gupta's *Pāradasaṃhitā*. Rāvaṇa's *Arkaprakāśa* is mentioned in Khare's commentary on the *Rasaratnasamuccaya*. It is cited as *Laṅkānātha* and *Laṅkeśa* in the *Śāligrāmanighaṇṭhubhūṣaṇa* of the *Brhannighaṇṭuratnākara*.⁹⁶⁴

Sanskrit commentaries on the *Arkaprakāśa* were written by Nārāyaṇaprasāda⁹⁶⁵ and Rāmanātha Vaidya.⁹⁶⁶

The *Arkaprakāśa* is a unique text in being the only monograph on arkas, a type of pharmaceutical preparation not met with in most Sanskrit medical treatises. The term arka may have been borrowed from Arabic or Persian;⁹⁶⁷ the Arabic word 'araq, the original sense of which is sweat, conveys several meanings. In Islamic medicine it is used to denote a medicinal tincture, essence, or distilled spirit.⁹⁶⁸ The earliest Sanskrit text mentioning an arka is Soḍhala's *Gadanigraha* (prayogakhaṇḍa, āsavādhikārara 272). The arkas described in the *Arkaprakāśa* are prepared by means of a yantra, described in chapter one, that is half-way towards a distilling apparatus.⁹⁶⁹ The distillates obtained by means of this apparatus may have been more or less perishable, since it is recommended to add sulphur (gandhapāṣaṇa) to all arkas or fumigate them with it (2.41), which may have increased their storage life.⁹⁷⁰ A yantra, more suitable for distilling purposes, and used for the preparation of mineral acids, is described in chapter two (2.72–80).

The five types of medicinal preparation, namely kalka, cūrṇa, rasa, taila, and arka (1.46), form an unusual series, from which kvātha and śītakaṣāya are absent. The verses on the preparation of mineral acids (śāṅkadrāvaka; 2.72–80) are interesting; the fluid produced, also called kṣārārka, has to be tested by dissolving bones, meat, and shells in it.

The arrangement of the diseases in chapters five to seven agrees partly with Mādhava's order. Differences are: the absence of arśas; the insertion of verses on children's diseases and the bālagrahas⁹⁷¹ between those on grahaṇī and agnimāndya (5.11–16); the addition of bhasmaka to the disorders of the digestive fire (5.21); the mention of insects (matkuṇa, makṣikā, maṣaka) and serpents in the verses on krimiroga (5.24); the insertion of verses on kaṇṭhadāha (5.35) and amlapitta (5.36) between raktapitta and rājayakṣman; the addition of verses on disorders caused by pitta (5.80) and kapha (5.81) between āmavāta and śūla; verses on gulma, plīharoga, and yakṛt (5.87–91) before those on mūtrakrcchra up to prameha; the absence of verses on udara in general and on vṛddhi; verses on śoṭha (6.9–11) between vidradhi and vrapaśoṭha; the insertion of a verse on mṛtarakta (6.28) between bhagna and nāḍivraṇa; verses on kuṣṭha (5.98–101) between medoroga and galagaṇḍa; the absence of verses on śītapitta and related disorders; the addition of snāyuroga (6.35) between visarpa and visphoṭaka; the addition of verses on phiraṅga (6.38–40) between visphoṭaka and masūrī; a different order of the chapters on mukha-, karṇa-, nāsā-, netra-, and śīroroga; verses on viṣa (7.59–

68) before those on women's diseases; the addition of verses on somaroga (7.72) and bahumūtra (7.73) after those on pradara; the addition of verses on vājīkaraṇa and related subjects at the end of chapter seven (7.92–98).

The *Arkaprakāśa* has two verses on diseases of elephants and horses (3.12; 4.53).

Chapter nine enumerates the items belonging to a rather long series of gaṇas, which are, partially, unusual; examples are: karṇa- (9.1), rañjana- (9.3–4), pācana- (9.57), uṣṇa- (9.58), dīpana- (9.59), and puṣṭikāraṇa (9.60–61).

Chapter ten describes zinc (jasada; 10.24–26) among the metals.

An interesting section is formed by the second half of chapter six, devoted to Śītalā. It opens with a dialogue between Brahmā and Śiva. It tells that the living beings were created by Brahmā in the Kṛtayuga, but that danger has arisen in the present age because of their abundant multiplication. Brahmā asks Śiva about the measures that can be taken in order to improve this condition of the world. As a curative measure, Śiva creates from his trident a dreadful being, called Kāla. Śiva's consort, Bhavānī, is requested to create a wife for this being. She creates a beautiful woman, called Bhavītavatā, and the couple is married by Bhavānī. From their union a host of evils arises, wild beasts, demons, diseases, etc. After some time, Kāla becomes so arrogant as to want to kill the great gods. In order to stop him, a serious disease is sent to attack him, from which he is only freed after praising Śītalā. It is said that everyone who praises Śītalā in the same way, by reciting the *Śītalāṣṭaka*, will obtain freedom from fear of disease. The stotra in praise of Śītalā (6.75–82) is identical with that found in the *Bhāvaprakāśa*.

Unfamiliar names of diseases found in the *Arkaprakāśa* are loharoga (1.45), mahārti (a children's disease; 7.88), mṛtarakta (6.28), and piṅgameha (10.29). Noteworthy names of children's diseases caused by demons are kaṅkara, ṣoṇaka, koṇa or sakoṇa, and kaṭhina (5.14). Some uncommon names of bālagrahas are Venī, Yeñī, Kukkurā, Raktasārikā, Prabhūtā, Tvaritā, and Rātri (5.15).

The materia medica of the *Arkaprakāśa* presents numerous unusual substances; part of these betray a Muslim origin. Some of the more important are: amlapatrī (9.17),⁹⁷² bājari (9.33),⁹⁷³ biḍālakaṇṭaka (8.36),⁹⁷⁴ cambelī (4.36; 8.35),⁹⁷⁵ candra-sūra (3.13; 4.12; 9.59),⁹⁷⁶ dakṣiṇā doḍī (9.40),⁹⁷⁷ dārucinī (4.21),⁹⁷⁸ dārucirṇaka (4.6),⁹⁷⁹ gaṇeśapriya (8.80),⁹⁸⁰ gaudapatrī (9.85), gaurīphala (9.23),⁹⁸¹ gorohiṇī (9.61),⁹⁸² gulāba (9.76),⁹⁸³ guladāvadī (4.36 and 99),⁹⁸⁴ guruheṭī (8.43), gururohiṇī (9.61), haṃsahelī (8.1),⁹⁸⁵ jalāśirṣaka (9.57), kṣīravārāhikā (4.26), kuhundarā (3.97), liṅgaḍaṇḍa (9.37), peṭhaka (2.92),⁹⁸⁶ revacinī (9.56),⁹⁸⁷ sannāha (9.56),⁹⁸⁸ and śauriṇī (2.18).⁹⁸⁹

No particulars are known about the authorship of this work.⁹⁹⁰ P. Hymavathi suggests that the author, Rāvaṇapaṇḍita, may be a son or disciple of Bhāvamīśra, because of the close resemblance between many verses of the *Arkaprakāśa* and the *Bhāvaprakāśa*.⁹⁹¹

The mention of phiraṅgaroga and the occurrence of the *Śītalāṣṭaka* make it possible to conclude that the *Arkaprakāśa* has been composed after the age of Bhāvamīśra. The description of a distilling apparatus and a number of items from the materia medica⁹⁹² are in favour of placing it in the seventeenth century or later.⁹⁹³ Kāñcīnātha's quotation

from the *Arkaprakāśa* in his commentary on the *Ratirahasya* is of no avail, because the date of this author is unknown.⁹⁹⁴

RĀYASIMHA: *Rāyasimhotsava* or *Vaidyakasārasaṃgraha*.⁹⁹⁵

REVAṆASIDDHA:⁹⁹⁶ (1) *Virabhaṭṭīya*; (2) *Revaṇasiddhakalpa*.

(1) *Virabhaṭṭīya*⁹⁹⁷ or *Āyurvedasāra*.⁹⁹⁸ This work⁹⁹⁹ consists of 244 verses, arranged in five chapters. The subjects dealt with are: (1) a description of the mythical prototype of a physician;¹⁰⁰⁰ a list of medical authorities and works; patients to be treated and to be rejected; the types of country (deśa); the doṣas, the tastes, and their interrelations; anatomy; (2) the classification of diseases; karmavipāka; (3) the effects of the ten kinds of vāyu¹⁰⁰¹ when vitiated, and of the other doṣas; (4) the examination of the pulse; (5) aṣṭādaśas; pīṇavardhanavidhi; puruṣa- and strīlakṣaṇa; yugalajñānalakṣaṇa.¹⁰⁰² One of the MSS¹⁰⁰³ has a sixth chapter of 120 verses, concerned with śoṇitavāta, dhanurvāta, the names of eight rasas,¹⁰⁰⁴ fevers, fasting in fevers; the digestive fire, prastāvāta, and some other, unconnected, subjects.

Authorities and works found in the list of chapter one are: *Āsvineya*, *Bāhaṭa*,¹⁰⁰⁵ *Bheṣajakalpa*, *Candrajñāna*,¹⁰⁰⁶ *Caraka*, *Cūḍāmaṇi*, *Dāmodara*, *Indrasata*(?), *Kalyāṇa*, *Kalyāṇakāraka*, *Kāpālin*, *Kārmukhi*(?),¹⁰⁰⁷ *Kṛṣṇeya*, *Mahāstra*(?), *Nāgārjuna*, *Nandinātha*,¹⁰⁰⁸ *Pārijāta*, *Rasadarpaṇa*, *Rasaputra*,¹⁰⁰⁹ *Rasārṇava*, *Rasendra*, *Sadyadi*(?), *Śākhara*,¹⁰¹⁰ *Samgraha*, *Śākteya*, *Śārīra*, *Somanātha*, *Somaparita*(?), *Sūtarāja*,¹⁰¹¹ *Sūtrasthāna*, *Vaśiṣṭha*, *Vibhra*(?), *Virabhaṭṭaka*, *Yamala*, and *Yuṣmini*.¹⁰¹²

This list demonstrates the influence of rasaśāstra and Tantrism on the *Virabhaṭṭīya*.

(2) *Revaṇasiddhakalpa*,¹⁰¹³ a treatise about mantras, yantras, and rasāyana.¹⁰¹⁴

Revaṇa was a Śaiva, who established a Śaivapīṭha in Kolānupāka (Āndhradeśa). This centre is supposed to have been shifted by him later to Balekonnur (Karnāṭaka).¹⁰¹⁵

SADĀNANDA: *Śārīraviveka*.¹⁰¹⁶

SAGĪ: *Vaidyavinoda*.¹⁰¹⁷

ŚĀLAGRĀMA: *Dhanvantari*.¹⁰¹⁸ This work is one of the sources of the *Rasayogasāgara*.¹⁰¹⁹

ŚĀLIGRĀMAPANḌITA: *Viravaidyaratnākara*.¹⁰²⁰

ŚĀMA: (*Sāra*)*saṃgrahatarāṅgiṇī*, a manual of therapeutics and dietetics in twenty-three chapters (tarāṅga). The *Yogatarāṅgiṇī* is referred to as a source.¹⁰²¹

ŚĀMADATTAPANḌITA: *Yogeśvara*.¹⁰²²

SAMANTABHADRA: Ugrāditya declares in his *Kalyāṇakāraka* (20.86) that his work is a shortened version of an extensive treatise on the eight limbs of āyurveda by Samantabhadra.¹⁰²³

A partially preserved medical treatise, the *Siddhāntarasāyanakalpa*, is ascribed to Samantabhadra.¹⁰²⁴ This work, said to have contained 18,000 verses, shows the influence of a Jain koṣa, the *Vaidyakanighaṇṭu* by Amṛtanandin, in which the names of many medicinal plants are replaced by synonyms connected with Jainism, such as ṛ-ṣabhā = āmalaka, vardhamāna = śvetairāṇḍa, vardhamānā = madhuramātuluṅga, vitarāga = āmra.¹⁰²⁵ A *Puṣpāyurveda*, now completely lost, is also attributed to him.¹⁰²⁶

The date of the medical author Samantabhadra is unknown. The famous Jain author of the same name is assigned to the second century,¹⁰²⁷ the first half of the fifth century,¹⁰²⁸ about A.D. 450 (?),¹⁰²⁹ fifth or sixth century,¹⁰³⁰ A.D. 600,¹⁰³¹ or the first half of the eighth century.¹⁰³²

ŚAMBHU: *Kārajñāna*.¹⁰³³ The chapter headings and the extent of the treatise differ considerably in the MSS.¹⁰³⁴

The text of one of the MSS¹⁰³⁵ consists of seven chapters (samuddeśa), dealing with: (1) kārajñānavicāra, (2) jīvitakṣaṇa, (3) mṛtyukṣaṇa, (4) nāḍīkṣaṇa, (5) jvaralakṣaṇa and jvarotpannavivarāṇa, and (7) jvaracikitsā.

Another MS¹⁰³⁶ contains 128 verses, arranged in five chapters (samuddeśa): (1) general precepts, (2) curable diseases, (3) incurable diseases, (4) nāḍis, (5) the treatment of fevers. Two additional chapters on nāḍī- and mūtraparīkṣā are said to be borrowed from the *Śārīgadharasamhitā*.

A third MS¹⁰³⁷ is complete in 177 verses, arranged in six chapters: (1) kālavivaraṇa, (2) jīvitakṣaṇa, (3) svara-, śārīra-, and nakṣatralakṣaṇa, (4) dvādaśajvaranidāna, (5) nāḍīparīkṣā, and (6) mūtraparīkṣā.

One of the MSS of the Bodleian Library, Oxford,¹⁰³⁸ has seven chapters: (1) and (2) title unknown, (3) svara-, gati-, mṛtyu-, nakṣatralakṣaṇa, (4) jvaralakṣaṇa, (5) and (6) mūtraparīkṣā, and (7) nāḍīparīkṣā. Another MS of the Bodleian Library¹⁰³⁹ quotes the *Rasaratnākara*, *Yogaratanāvalī* and other sources. Other MSS again describe nāḍī-, mūtra-, doṣa-, and viṭparīkṣā,¹⁰⁴⁰ and even aṣṭasthānaparīkṣā.¹⁰⁴¹

The introductory stanzas of the *Kārajñāna* usually mention that it is accompanied by a *Kālā*, probably a commentary.¹⁰⁴²

The *Kārajñāna* was rendered into Rājasthānī verse by Lakṣmīvallabha, a Jain monk of the Kharataragaccha, in A.D. 1684/85.¹⁰⁴³

A *Kārajñāna*¹⁰⁴⁴ is quoted or referred to in a *Bālacikitsā*,¹⁰⁴⁵ Vācaka Dīpacandra's *Laṅghanapathyanirṇaya*, Karandīkar's *Nidānadīpikā*, Meghamuni's *Meghavinoda*,¹⁰⁴⁶ and Nayanasukha's *Vaidyamanotsava*.

The quotation by Nayanasukha, whose *Vaidyamanotsava* was completed in 1592, establishes the terminus ante quem of the *Kārajñāna*. The presence of mūtra- and nāḍīparīkṣā among its contents shows it to be later than Vaṅgasena, respectively Śārīgadharā.¹⁰⁴⁷ The reference to aṣṭasthānaparīkṣā in one of the MSS¹⁰⁴⁸ proves that at least this version of the *Kārajñāna* cannot be earlier than about 1500.¹⁰⁴⁹

One of the edited versions of Śambhu's *Kārajñāna*,¹⁰⁵⁰ consisting of about 130 verses and some prose, gives clear evidence of Tantric influences.

The opening verse refers to Śambhu as the one who expounded the knowledge concerning time (kārajñāna). The treatise proceeds with describing the power of time

which ultimately destroys all living beings, even the gods (2–10). The four basic needs (vāñchā) of a human being (food, drink, sleep and sex) are mentioned (11), followed by descriptions of the six cakras, sixteen ādhāras, three lakṣas and five types of vyoman (12–23).¹⁰⁵¹ Then follow some verses (24–28), quoted from the *Svarodaya*, which are concerned with breathing through the nose and abnormal types of this breathing which are indicative of the approach of death within a specified period of time. The next verses (29–34), probably also borrowed from the *Svarodaya*, describe some aṣṭas characterized by the inability to perceive particular nakṣatras, and abnormal perceptions, especially with regard to the reflections of the sun and the moon in water. Some verses (35–40), partly taken from the *Carakasamhitā* (1.2.3–6), are about aṣṭas in general. The next part of the treatise is arranged in three chapters, called respectively pañcendriyārthavipratipatti (41–60), chāyāvipratipatti (61–90), and svabhāvavipratipatti (91–116), in agreement with three chapters of the *Suśrutasamhitā* (Sū.30, 31, 32). This part describes aṣṭas in verse and some prose, largely borrowed from the *Suśrutasamhitā*¹⁰⁵² and *Carakasamhitā*.¹⁰⁵³ The work ends with verses on chāyāpuruṣalakṣaṇa (122–134), here said to derive from Śambhu, which are also found in Trimalla's *Yogatarāṅgiṇī* (14.1–11) and *Bṛhadyogatarāṅgiṇī* (44.30–40), where they are quoted from the *Śivāgama*.

A *Samnipātakalikā* is also attributed to Śambhu.¹⁰⁵⁴

ŚAMKARAKAṬI: *Vṛttisamkhyānidāna*.¹⁰⁵⁵

SANĀMAKARAṆA, son of Purovikaraṇa(?): *Agadarājatantra*.¹⁰⁵⁶

SANATKUMĀRARAHASYA: *Anubhogakalpaka*, in twelve chapters (prakaraṇa), on the properties of drugs.¹⁰⁵⁷

ŚĀNTAPPA: *Akalāṅkasamhitā*.¹⁰⁵⁸

SARVAHITĀMṚTADATTA: *Brahmavedasārāṅgadharacakra*.¹⁰⁵⁹ This work forms part of the Tibetan Tanjur under the title of *Chāis-paḥi rig-byed rgya-mchoḥi yan-lag hjin-pa g-yo-ba-can*. It was collected by Dar-mo sman-rams-pa blo-bzan chos-grags¹⁰⁶⁰ and translated in the Potala into Tibetan by Raghunātha, an Indian physician from Mathurā,¹⁰⁶¹ and Lhun-grub.¹⁰⁶²

SAUDĀSAPUTRA: *Vaidyamanotsava*.¹⁰⁶³

SĀYANA: *Sārpiya*.¹⁰⁶⁴

ŚEṢARĀJA: *Śeṣarājaniḥaṇṭu*.¹⁰⁶⁵

SĪTĀRĀMA ŚĀSTRIN: *Śākanighaṇṭu*.¹⁰⁶⁶

SĪTĀRĀMA SOMANĀTHA: *Vaidyasāra*.¹⁰⁶⁷

ŚIVA is the reputed author of several works. (1) (*Auśadhi*)*kalpalatā*.¹⁰⁶⁸ (2) *Āyurveda*, a treatise in the form of a dialogue between Śiva and Pārvaṭī.¹⁰⁶⁹ (3) *Bālatantra* or *Cikitsākalikā*.¹⁰⁷⁰ (4) *Indrajāla*,¹⁰⁷¹ a short Tantric treatise on ṣaṭkarman. As usual in such a work, subjects dealt with are: making a woman infertile, curing infertility, preventing

abortion and stillbirths, promoting potency in males, etc. This treatise cannot be earlier than the seventeenth century, since Kṛṣṇānanda Vidyāvāgīśa's *Tantrasāra* is mentioned as one of its sources. (5) *Sālyatantra*.¹⁰⁷² (6) *Śārīrakasūtrasthāna*.¹⁰⁷³ (7) *Udakalakṣaṇa*.¹⁰⁷⁴ (8) *Nāḍīvijñānīya*.¹⁰⁷⁵

ŚIVACANDRA: *Vaidyakasāra*.¹⁰⁷⁶

ŚIVADĀSA: (1) *Pathyāpathyādhikāra*;¹⁰⁷⁷ (2) *Sārāvalī*;¹⁰⁷⁸ (3) *Yogasāra*(*samuccaya*).¹⁰⁷⁹

ŚIVA DULĀRE: *Pathyāpathya*.¹⁰⁸⁰

ŚIVADVIJA: *Śivasādhaka*.¹⁰⁸¹

ŚIVĀNANDABHAṬṬA GOSVĀMIN: *Vaidyaratna*.¹⁰⁸²

ŚIVAPRASĀDA: *Prastāvasaṃgraharatnākara*.¹⁰⁸³

ŚIVARĀMA, a Siddha: *Siddhasārakhaṇḍa*.¹⁰⁸⁴

SOMANĀTHA: *Kalyāṇakāraka*.¹⁰⁸⁵

SOMANĀTHA MAHĀPĀTRA: *Vaidyasamkṣiptasāra*.¹⁰⁸⁶

SOMAYA: *Bhiṣagvarāṇjana*, written in Telugu, in the form of a dialogue between Dhānvanṭari as the teacher and Agastya as his pupil. Sources mentioned are the *Divyacintāmaṇi*, *Rasapradīpikā* and *Bāhaṭa*. This work may date from the first half of the seventeenth century.¹⁰⁸⁷

ŚRĪDHARADEVA: *Vaidyāmṛta*.¹⁰⁸⁸

ŚRĪDHARA (MIŚRA): (1) *Vaidyamanotsava*;¹⁰⁸⁹ (2) *Vaidyāmṛta*.¹⁰⁹⁰

ŚRĪGUMĀDĪŚA: *Sārasaṃgraha*.¹⁰⁹¹

ŚRĪKĀNTADĀSA: (1) *Vaidyavallabha*;¹⁰⁹² (2) *Paribhāṣā*.¹⁰⁹³

ŚRĪKĀNṬHANANDANA of Bodhi village: *Paryāyamañjari*, a medical lexicon.¹⁰⁹⁴

ŚRĪKĀNṬHAPANDITA:¹⁰⁹⁵ *Yogaratnāvalī*,¹⁰⁹⁶ a treatise of Tantric inspiration, in nine chapters (paṭala or pariccheda) with a total of 2,500 verses.¹⁰⁹⁷ It deals with Tantric subjects, medicine, cures for poisoning, measures counteracting afflictions caused by demons, etc.

The titles of the chapters are: samastaviṣanigraha (verses 1–242), bhūtagrahaśākinīnām jvaranigrahaḥ (243–440), samīhitasādhikakarmādhikāra (441–1077), kautukādhikāra (1078–1589), vaidyakādhikāra (1590–2198), rasāyanavidhi (2199–2346), ratnādi-parikṣādhikāra (210 verses), kālajñānavidhi (seventy-one verses), and auśadhakitsāprakaraṇa (44 verses; extracted from Nāgārjuna's *Kakṣapuṭa*).¹⁰⁹⁸

The *Yogaratnāvalī* enumerates twelve treatises on poisons (viṣatantra):¹⁰⁹⁹ *Pakṣirāja*,¹¹⁰⁰ *Śikhāyoga*,¹¹⁰¹ *Bindusāra*, *Śikhāmṛta*,¹¹⁰² *Tottala*,¹¹⁰³ ...*kūṭa*, *Kṛtsnāṅga*,¹¹⁰⁴ *Tottalottara*,¹¹⁰⁵ *Kaṭāha*,¹¹⁰⁶ *Chāgatuṇḍa*,¹¹⁰⁷ *Sugrīva*,¹¹⁰⁸ and *Karkaṭāmukha*.¹¹⁰⁹

An unspecified *Yogaratnāvalī* is quoted or referred to in a number of medical and other treatises: Basava's *Śivatattvaratnākara*, Gulrājśarmamiśra's *Viśikhānupraveśavijñāna*, Jñārasarāma's version of the *Amṛtasāgara*, Kalyāṇadāsa's *Bālatantra*

(according to Vācaka Dīpacandra), the *Kautukasāroddhāra*, *Pākamārtanḍa*, *Ratnāka-rauṣadhayogagrantha*, *Śāringadharapaddhati*, Ṭoḍara's *Āyurvedasaukhya*, Trimalla's *Yogatarāṅgiṇī* and *Brhadyogatarāṅgiṇī*, the *Vīrasimhāvaloka*, and the *Yogarātnākara*.

Evidence on the identity of the Śrīkaṇṭhapāṇḍita who wrote the *Yogarātnāvalī* is not available.

P. Hymavathi,¹¹¹⁰ however, does not hesitate to regard him as the philosopher Śrīkaṇṭha, who wrote a famous commentary on the *Brahmasūtra*.¹¹¹¹ P. Hymavathi gives the following information:

Śrīkaṇṭhapāṇḍita was a great scholar in many fields, more popular as a Śaiva philosopher than as a medical scientist. A number of famous men belonged to his circle of students. Among these are: Mādhava Vidyāraṇya, Sāyaṇa and Bhoganātha, as well as the medical writer Naraharipāṇḍita, also called Nṛsiṃhapāṇḍita.

Śrīkaṇṭha was the guru of Saṅgama II of the Vijayanagar dynasty,¹¹¹² who mentions him as such in one of his grants.

Śrīkaṇṭha's place of residence was, according to some, the Āmardhakapīṭha of Kāleśvaram, situated in the present Karimnagar district; others are convinced that he lived in Śrīkālahasti.¹¹¹³ Inscriptions referring to him are found in the Nellore¹¹¹⁴ district.

P. Hymavathi assigns Śrīkaṇṭha to the period A.D. 1300–1360.¹¹¹⁵

ŚRĪKAṆṬHAŚARMA: *Jīvarakṣāmṛta*.¹¹¹⁶

ŚRĪKAṆṬHAPĀṆḌITA, also called Śrīkaṇṭhasūri, was the author of the *Hitopadeśa*.¹¹¹⁷

The treatise consists of about 1,050 verses, arranged in ten chapters (*samuddēśa*).

Chapter one (2) enumerates the eight items of *aṣṭasthānaparīkṣā*,¹¹¹⁸ but describes in detail five forms of *parīkṣā* only. More than half of the chapter (3–83) is devoted to the examination of the pulse (*nāḍīparīkṣā*). The wrist is said to be the chief place for this examination, but information on particular groups of diseases can be collected by feeling the pulse elsewhere: the pulse of the feet and ankles indicates disorders of the lower part of the body (9), the *nāḍī* of the umbilical region, called *bodhinī*, informs about diseases like *udara*, *arśas* and *bhagandara* (12–13), etc. Among the places to be examined is also the *brahmarandhra* (11). Twenty-four *nāḍīs* are said to transport the three *doṣas* (16–17); *Idā* conveys in particular *vāta*, *Piṅgalā pitta*, and *Suṣumnā kapha* (23).¹¹¹⁹ The usual subjects of a treatise on *nāḍīparīkṣā* are covered: the characteristics of the pulses of the *doṣas* when normal and out of balance (20–41), the pulses in particular diseases (42–51), signs indicating incurability or death within a specified period of time (52–79), etc.¹¹²⁰ The second subject of chapter one is the examination of the urine (*mūtraparīkṣā*; 84–123). The characteristics of the urine in disorders of the *doṣas* are described (87–92), the examination by means of a drop of oil (*tailabindu*; 93–98), the characteristics of the urine in a series of diseases (101–113),¹¹²¹ the prognostic meaning of the direction in which the drop of oil spreads on the surface of the urine (114–120),¹¹²² prognostication by adding ashes to the drop of oil (121), and the prognostic meaning of the form assumed by the drop of oil (122–123).¹¹²³ The examination of the eyes (*netraparīkṣā*; 124–132),¹¹²⁴ face (*mukhaparīkṣā*; 133–134),¹¹²⁵ and tongue (*jihvāparīkṣā*; 135–138)¹¹²⁶ is also dealt with, but verses on *mala*-, *śabda*-, and

sparsāparīkṣā are absent.

Chapter two has some verses on the actions of the three *doṣas* (2–4), but is mainly concerned with the origin, symptoms and treatment of various types of fever (6–90; 102–104) and with the treatment of *jvarātisāra* (91–93). Chapter three is about diseases of the head (1–18), ears (19–25),¹¹²⁷ nose (36–50),¹¹²⁸ mouth,¹¹²⁹ teeth and lips (51–79), and throat (80–105).¹¹³⁰ Chapter four is about diseases of the eyes (1–104), and about *nidrā* and *tandrā* (105–109). Chapter five deals with the seven disorders located in the cardiac region: *kāsa* (2–14), *śūla* (15–53), *udhvasī* (54), *kṣayaroga* (55–73),¹¹³¹ *gulma* (74–87), *hikkā* (88–94), and *hṛdroga* (95–99). Chapter six is about the six abdominal diseases: *chardi* (2–14), *udara* (15–30), *śvāsa* (31–37), *plīhan* (38–44), particular forms of *śūla* (51–56), and *ahijambuka* (1),¹¹³² and about the six disorders of the urinary tract: *prameha* (61–71), *mūtrakṣcchra* (72–81), *nararoga* (82–90),¹¹³³ *mūtraśarkarā* (91–99), *mūtrarodha* (100–107),¹¹³⁴ and *uṣṇavāta* (108–109).¹¹³⁵ Chapter seven is concerned with *kuraṇḍa* (1–15),¹¹³⁶ *arśas* (16–33), *atisāra* (34–62), *grahaṇī* (63–81), and the five diseases of the legs (*pādaroga*): *ślīpāda* (83–84), *ringīnivāta* (85–87), *ūrustambha* (88–91), *vicarcikā* (92–95), and *turvāla* (82).¹¹³⁷ Chapter eight deals with *lūtā* (1–30), *bhagandara* (31–36), *jvālāgardabha* (37–41), *visphoṭa* (42–45), *govara* (46), *śītālā* (47–49), and *śopha* (50–72),¹¹³⁸ chapter nine with *kuṣṭha* (1–56) and *vātaroga* (57–98), and chapter ten with *bālāroga* (1–27), *strīroga* (28–59), *vraṇa* (60–66), *nāḍivraṇa* (67–77), *visarpa*, *raktamaṇḍala*, *kaṇḍū* and *dadru*¹¹³⁹ (78–84), *arbuda* (85–87), *raktapitta* (90–92), *pāṇḍuroga* (93–97), *apasmāra* and *unmāda* (98–104), *agnimāndya* (105–110),¹¹⁴⁰ *agnidagdha* (111–112), *viṣa* (113–119), and *granthi* (120).¹¹⁴¹

The *Hitopadeśa* is written in an easy style. The arrangement of the diseases as found in this text has no parallels elsewhere. The *tridoṣa* theory has a very important place, as appears from the description of the *doṣic* types of numerous diseases.¹¹⁴² Some generally recognized diseases are not mentioned at all, e.g., *arocaka*, *mūrchā*, *pānātyaya*, *ānavāta*, *udāvarta*, *ānāha*, *medoroga*, *vidradhi*, *bhagna*, *śītapitta*, *amlapitta*, and the majority of the *kṣudrarogas*. Diseases like *somaroga*, *phiraṅgaroga*, etc., are absent as well. The symptoms of an illness are usually described prior to its therapy.¹¹⁴³

The recipes are simple for the larger part; a few only are more complicated and provided with names.¹¹⁴⁴ *Rasayogas* are not found in this treatise and mercury (*pārada*) is mentioned once only (3.13); opium and Cannabis are not prescribed. Religious elements are almost absent from Śrīkaṇṭha's therapy,¹¹⁴⁵ even in the treatment of *śītālā*.

Sources are hardly mentioned; Śrīkaṇṭha refers to a *Śivamata* (1.80)¹¹⁴⁶ and to Śambhudeva (8.30).¹¹⁴⁷

Śrīkaṇṭhasūri's *Hitopadeśa* is one of the sources of the *Rasayogasāgara*. The *Hitopadeśa* is quoted in Ananta's *Pratāpakalpadrūma*, Vācaka Dīpacandra's *Laṅghana-pathyanirṇaya*, and Meghamuni's *Meghavinoda*.¹¹⁴⁸ A *Vaidyakaśārasaṃgraha* (probably identical with the *Hitopadeśa*) is cited by Meghamuni. Śrīkaṇṭha is quoted in the *Prayogāmṛta*, Śrīkaṇṭhasambhu in the *Śāringadharapaddhati*.¹¹⁴⁹

The *Hitopadeśa* presents a large number of noteworthy features in the field of nosology. The following eight types of fever are enumerated: caused by *vāta*, *pitta*, *kapha*, *saṃnipāta*, *abhicāra*, *devaprakopa*, *grahaprakopa*, and an eighth one of mental

origin (mānasa) (2.7).¹¹⁵⁰ Two irregular fevers are added to the usually mentioned series: a type recurring every fifth (pañcamaka; 2.81) and one recurring every sixth day (ṣaṣṭhadinodbhava; 2.83).¹¹⁵¹

Names of diseases occurring in this work only are: ahijambuka (6.1), bāla (7.87),¹¹⁵² chalikā (3.36),¹¹⁵³ dhīmaḍa (10.82),¹¹⁵⁴ govāra (8.46), khasara (10.79),¹¹⁵⁵ nālagulma (6.57–59), turvala (7.82), and udhvasī (5.1 and 54; 9.88).¹¹⁵⁶ The term ghūrmi (4.107) is employed as a synonym of tandrā; kaṭigrdhra (6.54–55) may be a synonym of kaṭiśūla. The term riṅgiṇivāta (7.82 and 85–86) denotes the disorder commonly known as grdhrasī.¹¹⁵⁷ The disorder called usṇavāta, usually regarded as a variety of mutrāghāta, is separately mentioned (6.60 and 108–109).¹¹⁵⁸

The verses on lūtā¹¹⁵⁹ are interesting. Four doṣic groups of lūtā are distinguished, subdivided into a number of types, each one having its own name and location. The members of the vāta group are: śvetā, located on the right hand; kṛṣṇakarī, on the left hand; kapilā, on the nose; pītā, on the chin; trimāṇḍalā, on the right half of the body; vāmāṅgabhedinī, on the left half; viśā, on the right shoulder; viśāpāhā, on the left shoulder; tāmravarṇā, on the kṛkātikā.¹¹⁶⁰ The members of the pitta group are: kasanā, on the right hand; raktavātī, on the left hand; virakṣetragavā, on the right half of the body; mecakā, on the left half; karkatī, on the right side of the chest; piṅgalā, on the back. The kapha types are: raktā, on the right ear; pāṃśuvarṇikā, on the left ear; asitā, in the left armpit; sitā, in the right armpit; śyāmā, on the right side of the abdomen; śrītā and udarā,¹¹⁶¹ on the left side of the abdomen; varadā, in the umbilical region; jaladā and ambukā,¹¹⁶² on the tongue. The saṃnipāta types are: mālāṅgulī, on the head; tālukarṇikā, on the forehead; kālakarṇī, between the eyebrows; jaladā, on the tongue; maṇipatnī, on the palate; taptavarṇikā, when hikkā is present; vaidehī, in the pharynx; vahnīkarṇikā, in the cardiac region.

The disease called jvālāgardabha¹¹⁶³ (8.37–39) is also divided into a number of types according to its location. These types are: gaura, on the back; piṅgala, on the head; kṛṣṇāśya, in the cardiac region; saumyadrś, on the nose; kalahapriya, on the legs; vijaya, on the hands; kumbhakarṇa, on the buttocks; kapila, on the lateral parts of the abdomen; priyadarśana, on the chest. The group of diseases called kuṣṭha is divided into six (9.2–5) or the usual eighteen types (9.6–8). Ten kinds of vāta are distinguished and their actions described (9.58–65). Ten nāḍīs, in which these ten kinds are supposed to circulate, are mentioned by name:¹¹⁶⁴ Idā, Piṅgalā, Suṣumṇā, Hastijihvikā, Alāmukhā,¹¹⁶⁵ Yaśā,¹¹⁶⁶ Mūṣā,¹¹⁶⁷ Kandhārī,¹¹⁶⁸ Śikhinī,¹¹⁶⁹ and Kuhū (9.66–67).

Noteworthy names of medicinal plants are: bhūjayantī (10.73), devadaṅgarī¹¹⁷⁰ (6.64 and 68), dullarī (2.75; 3.33; 4.105; 5.34 and 38; 6.31; 7.68), karṇamotā (10.69), kāsulī (2.26, 27, 39, 56), kaṭudugdhikā (7.22),¹¹⁷¹ kaṭutunḍīrikā (4.84),¹¹⁷² kāyaphala (4.36 and 67),¹¹⁷³ laghuṭulvikā (6.92), maṅku¹¹⁷⁴ (8.64; 9.26, 29, 35 and 39), paṅgulī (10.37), riṅgiṇī¹¹⁷⁵ (2.52 and 73; 3.31 and 33; 5.34 and 38; 7.56 and 68; 8.64), riṅgiṇikā (2.24), tavakṣīra (5.7; 10.36),¹¹⁷⁶ and tuṇḍīrī (2.101).

The author's name is Śrīkaṇṭhapāṇḍita (10.122). Variants are Śrīkaṇṭhasūri,¹¹⁷⁷ Śrīkaṇṭhaśāmbhu,¹¹⁷⁸ Śrīkaṇṭhaśivapaṇḍita,¹¹⁷⁹ and Śivapaṇḍita.¹¹⁸⁰ He was a Jain monk, as is apparent from the maṅgala, addressed to Rṣabha, and a number of references to Jainism.¹¹⁸¹ He is called a paramajainācārya,¹¹⁸² and resided in

Siddhapura¹¹⁸³ and Dhūlegāṃv.¹¹⁸⁴ Other medical works of his hand are *Bhiṣagbhūṣaṇa* and *Yogapradīpa*.¹¹⁸⁵ He is probably different from the author of the *Yogarātnāvalī*, who was a Hindu.¹¹⁸⁶

Śrīkaṇṭhasūri is said to have lived in the period A.D. 1445–1545.¹¹⁸⁷ Quotations from the *Hitopadeśa* are found in some works from the eighteenth century. One of the MSS dates from 1734/35.¹¹⁸⁸

ŚRĪKṚṢṆARĀYA: *Siddhayogasamuccaya*.¹¹⁸⁹

ŚRĪNĀTHA, son of Ghāsīrāma: *Jagatprakāśa*.¹¹⁹⁰

ŚRĪNIDHI: *Bhāvasāra*.¹¹⁹¹

ŚRĪNIVĀSA was the author of the *Cikitsātilaka*,¹¹⁹² a comprehensive textbook of medicine, based on Vāgbhaṭa's *Aṣṭāṅgahṛdayasaṃhitā*.

The work¹¹⁹³ consists of 130 chapters (adhyāya), arranged in five sections: sūtra- (forty chapters), śārīra- (ten chapters), nidāna- (sixteen chapters), cikitsita- (twenty-four chapters), and uttarasthāna (forty chapters). The subjects of all the chapters are enumerated in a table of contents at the beginning of the work (1.27–43ab). This table shows that the author modelled his work on the *Aṣṭāṅgahṛdayasaṃhitā*.

The sūtrasthāna, which will be discussed below, has ten chapters more than the parallel section of Vāgbhaṭa's work. The śārīrasthāna has four chapters more; three of these have been added: saṃbhogasādhana (chapter one), garbhanipīḍana (chapter three), and vandyāviñjāna (chapter four), while Vāgbhaṭa's chapter six was divided into two, one on dreams (chapter nine), the other on messengers (chapter ten). The order of the chapters of the nidānasthāna agrees exactly with that of Vāgbhaṭa's work, and the same applies to the uttarasthāna. The cikitsasthāna has two extra chapters at its beginning: (1) ruṇnivṛtti, (2) pathyakrama.

More details are available only on the sūtrasthāna, since the remaining sections have not been preserved.¹¹⁹⁴

This sūtrasthāna is a re-arrangement of the matter contained in the same section of Vāgbhaṭa's work, with a number of additions. The order of Vāgbhaṭa's chapters one to fourteen was changed, and four chapters (four to six and nine) were added, although their contents are not new, being borrowed from the *Aṣṭāṅgahṛdaya*. The sequence of the remaining chapters is basically the same in both sūtrasthānas. The *Cikitsātilaka*, however, has six chapters more (twenty-three to twenty-five and twenty-seven to twenty-nine), the contents of which, as well as their titles, are closely related to the six chapters of Vāgbhaṭa's kalpasthāna. The advantage of the incorporation of the kalpasthāna at an appropriate place in the sūtrasthāna is that all the aspects of pañcakarman are dealt with together, and not scattered over two sthānas.

Although Śrīnivāsa does not mention Vāgbhaṭa as his main source,¹¹⁹⁵ by far the greater part of the sūtrasthāna of the *Cikitsātilaka* is a slightly shortened and re-arranged version of that of Vāgbhaṭa's work. New material is sparsely represented. It is found in an appendix (pariśiṣṭa) of 187 verses, added to chapters twelve and thirteen on dina- and rtucaryā, and concerned with betel chewing, fragrant substances, articles of clothing, etc., making it thus resemble Bhoja's *Cārucaryā*.¹¹⁹⁶ Some new

verses occur in chapter fifteen (on liquids); chapter sixteen (on articles of food and drugs) has an udyānavarga of forty verses on horticulture inserted.¹¹⁹⁷

The *Cikitsātilaka* is not quoted in later works.

The name of the author is Śrīnivāsa or Aijaśrīnivāsa, of Kauśikagotra and Ārvela family, son of Raghunāthārya, grandson of Aijanāgārya.¹¹⁹⁸ He was a pupil of Padanārya, with whom he studied the *Āyurvedakalānidhi*,¹¹⁹⁹ and a devotee of Dattātreya.¹²⁰⁰

The details of Śrīnivāsa's genealogy point to a southern origin.¹²⁰¹ P. Hymavathi regards Iyija¹²⁰² as Śrīnivāsa's native place. Iyija is situated in the border area of Āndhra Pradesh and Kārnāṭaka, in the present Mahbubnagar district.¹²⁰³

There are no clues pointing with any certainty to Śrīnivāsa's date. A. Rahman, who also ascribes the *Ṣaḍrasanighaṇṭu* to him, regards him as anterior to the fourteenth century. P. Hymavathi, pointing to Telugu and Kannaḍa words used by Śrīnivāsa, is of the opinion that he lived during the period of the Vijayanagar kingdom, when Telugu, Kannaḍa and Tamiḷ speaking regions were united. The fact that the author was a Vaiṣṇava and devotee of Dattātreya is adduced by him as an additional argument. Claiming that the *Cikitsātilaka* quotes a verse from the *Bhāvaprakāśa*¹²⁰⁴ and does not yet contain new substances found in the *Yogarātnākara*, he concludes that Śrīnivāsa must have lived between the last quarter of the sixteenth and the first quarter of the seventeenth century.¹²⁰⁵

ŚRĪNIVĀSA: *Vaidyaśāstradīpikā*.¹²⁰⁶

SUBRAHMANYA: *Bāhaṭagrāṇtha*, a treatise in nine chapters (pariccheda), dealing with the following subjects: nidānayaoga, kaṣāyayaoga, pathyāpathyayaoga, tailayaoga, ghr̥tayaoga, lehyavargasamāpti, cūrṇavāṭakayaoga, auśadhayaoga, and rasayaoga. The beginning of chapter one refers to aṣṭasthānaparīkṣā. The *Siddhasāra* is mentioned as a source.¹²⁰⁷

Some suppose that the *Bāhaṭagrāṇtha* was written by a Bāhaṭācārya, who was also the author of the *Aṣṭāṅganighaṇṭu*; this Bāhaṭa is regarded as having lived during the last quarter of the thirteenth and the first quarter of the fourteenth century, since references to and quotations from his *Bāhaṭa* are found in the works of other scholars from the middle of the fourteenth century onwards.¹²⁰⁸

Formulae from the *Vāhaṭa* are found in the *Rasayogasāgara*.¹²⁰⁹

The date of the *Bāhaṭagrāṇtha* is important because it mentions aṣṭasthānaparīkṣā, a procedure also found in Cāmuṇḍa's works.¹²¹⁰

The Telugu medical author Somaya relates that he began composing his *Bhīṣagvarāṇjana* after studying the *Bāhaṭagrāṇtha*.¹²¹¹ Muḍumbi Veṅkaṭācārya, who translated the *Rasapradīpikā* into Telugu,¹²¹² paid obeisance to Bāhaṭa. The author who translated Trimalla's *Śataśloki* into Telugu refers to Trimalla as someone well versed in bāhaṭaśāstra. The physician described in the Telugu work called *Paramayogīvilāsamu*, written by Tiruveṅgalanātha, holds the *Bāhaṭapustakamu* in his hand.¹²¹³

The *Bāhaṭagrāṇtha* was translated into Telugu verse by Elakūci Bālasarasvatī, who

lived in the first quarter of the seventeenth century according to P. Hymavathi.¹²¹⁴ B. Rama Rao,¹²¹⁵ who discussed this subject earlier, was more careful and stated that the *Bāhaṭamu* of Bālasarasvatī may be either the *Bāhaṭagrāṇtha* or another work of the same title, which is a Telugu translation of the *Aṣṭāṅgaḥṛdaya*, made, or at least completed by, Liṅgayārya, the pupil of Bālasarasvatī.

Bālasarasvatī lived at the court of Veṅkaṭādri of Paritāla on the banks of the river Kṛṣṇā, during the last part of the sixteenth century, according to B. Rama Rao.

SUKHALATA: *Āyurveda*.¹²¹⁶

ŚUKADEVA: *Vaidyakalpadruma*.¹²¹⁷

SUKHĀNANDA: *Sukhānandavinoda*.¹²¹⁸

ŚUKRĀCĀRYA: *Ulūkakalpa*.¹²¹⁹

SUNDARA: *Indudīpikā*.¹²²⁰

SUNDARADEVA, son of Govindadeva, pupil of Viśvarūpāfirṭha, was the author of several treatises.

(1) *Bhūpālavalabbha* or *Bhūpacaryā*,¹²²¹ a work on dietetics and pathology. The author seems merely to repeat the precepts of predecessors, frequently interlarding his text with paraphrases and comments. Vāgbhaṭa is occasionally referred to for further details on a particular subject. The work begins with the statement that the rules of conduct to be observed during the six seasons will be dealt with. The first chapter is about the rainy season. It contains a, possibly later inserted, section on wrestling and the training of wrestlers, written in the form of a conversation between Kṛṣṇa and Someśvara. This section, called mallavidyā, has been taken from the *Mallapurāṇa*.¹²²²

(2) *Cikitsāsundara*;¹²²³ (3) *Līlāvati*, a short treatise on hygiene and dietetics;¹²²⁴ (4) *Yogoktivilāsa*;¹²²⁵ (5) *Yogoktyupadeśamṛta*.¹²²⁶

Sundaradeva may well be the son of the Govindadeva who wrote the *Yogoktīlāvati*.¹²²⁷

SURAJIT: *Laghunidāna*.¹²²⁸

SUṢEṆA¹²²⁹ was the author of the *Āyurvedamahodadhi* or *Annapānavidhi*.¹²³⁰ The possibility cannot be excluded that the *Annapānavidhi* formed part of a larger *Āyurvedamahodadhi*.¹²³¹

The work of Suṣeṇa¹²³² is concerned with dietetics and describes the medicinal properties of foods and drinks, adding the therapeutic effects of physical exercise, rubbing of the feet, chewing betel, and wearing various kinds of clothes.¹²³³ It contains 634 verses in various metres and is divided into a long series of Vargas, devoted to water, dairy produce, oils, prepared foods, fruits, etc. P. V. Sharma supposes it to have been written by a royal physician for use by the king.¹²³⁴

There are no commentaries on this text, though Dāmodara's *Ārogyacintāmaṇi* has erroneously been regarded as such.¹²³⁵

Apart from the *Āyurvedamahodadhi*, some more treatises may have been written by Suṣeṇa; other works recorded by Th. Aufrecht are: *Guṇāguṇī*, *Śārīraka*, and *Vṛ-*

ttamāṇikyamālā.¹²³⁶ No information on these works is available.

Suṣeṇa is quoted or referred to in the *Brhadrasarājasundara*, the *Hamsarājanidāna*, the *Paraśurāmapratāpa*,¹²³⁷ Raghunātha's *Bhojanakutūhala*, the *Śāligrāmanighaṇṭubhūṣaṇa*, Ṭoḍara's *Āyurvedasaukhyā*, and Vācaka Dīpacandra's *Laṅghanapathyanirpaya*.

Worthy of mention is the description of fruits like amṛtaphala (kṛtānnavarga 6), piṇḍakharjūra (phalavarga 39), sindola or sindīphala (phalavarga 40), sirākośātakī (phalavarga 46), suvarṇakadalī (phalavarga 41), and utatī (phalavarga 42),¹²³⁸ vegetables like rājavallī (śākavarga 12), sindhanī (śākavarga 38), and vārikaśeru (śākavarga 31), and dishes like various kinds of śikhariṇī (śikhariṇīvarga).

P.V. Sharma mentions a MS of a work by Suṣeṇa, probably the *Annapānavidhi*, in which opium, mica, etc., are described.¹²³⁹

Information on Suṣeṇa as a medical author is not available. Suṣeṇa is known from the *Rāmāyaṇa* as a physician in the army of Rāma, who treated Lakṣmaṇa and could bring the dead to life.¹²⁴⁰ The *Devīpurāṇa*¹²⁴¹ has recorded a Suṣeṇa in a list of sages versed in medicine. Suṣeṇa is also the name of a physician mentioned in Bāṇa's *Harṣacarita*.¹²⁴²

A recipe, called *siṃhaṇacūrṇa*, is found at the end of one of the MSS of the *Annapānavidhi*.¹²⁴³ If *Siṃhaṇa*, after whom the formula is called, is identical with the Yādava king of this name (1210–1247),¹²⁴⁴ during whose life Keśava was active, Suṣeṇa is posterior to the first half of the thirteenth century. A terminus ante quem is provided by the *Paraśurāmapratāpa* (first half sixteenth century), which gives a long extract from Suṣeṇa's work,¹²⁴⁵ and Ṭoḍara's *Āyurvedasaukhyā* (sixteenth century), which quotes him. The earliest MS known is dated A.D. 1622.¹²⁴⁶ P.V. Sharma's claims that Suṣeṇa is quoted in the *Madanapālanighaṇṭu* (A.D. 1375) and the *Kaiyadevanighaṇṭu* (first half of the fifteenth century). Confirmation of this claim would mean that Suṣeṇa may belong to about A.D. 1350.

SVĀMIKUMĀRA: *Vaidyaśāstra*, a work in verse, with explanations in prose.¹²⁴⁷

ŚYĀMADĀSA: *Paribhāṣasamgraha*.¹²⁴⁸ Some of the subjects dealt with in this work are: mānāparibhāṣa, doṣabalābala, auśadhamānādividhāna, anupānavidhi, tuvarakavṛkṣalakṣaṇa, tajjanmāsthānanirūpaṇa, ārdraḍṛavyamātrā, śuṣkadravyamātrā, snehapāka, pāradaśodhana, kalkamātrā, and kṣīrapāka.¹²⁴⁹

ŚYĀMADATTA: *Yogeśvara*.¹²⁵⁰

ŚYĀMALĀLA: *Sadyogaratnāvalī*.¹²⁵¹

TELKURĀYA, son of Śīṅgayadeśika of Pulpāka family: *Nidānayogaratnāvalī*,¹²⁵² a work on the diagnosis and treatment of various diseases. The author distinguishes, as usual, four types of ajīrṇa, but calls them dhūma, vidhūma, viśpaṣṭa, and rasaśeṣa. Opium (ahipheṇa) is prescribed against diarrhoea and grahaṇī.¹²⁵³

Some scholars are, on the basis of internal evidence, of the opinion that this work dates from about A.D. 1600.¹²⁵⁴

TIMMARĀJAKAVI: *Vaidyajiṇa*.¹²⁵⁵

TIRMALĀRYA: *Śāstrādīpikā* or *Śāstrādarśa*.¹²⁵⁶

TIRUVENKAYAPPA: *Śāstrādarśa*.¹²⁵⁷

TRIPALLĪBHATTA: *Taraṅgiṇī*.¹²⁵⁸

TRIPURĀRI: *Rukpratikriyā*.¹²⁵⁹

TRIPURĀRIN: *Cikitsāsārasamgraha*.¹²⁶⁰

TRYAMBAKA: *Tryambakacikitsā*.¹²⁶¹

TULASĪDĀSA, son of Vaidya Śrīraṅga of Mūdhāḍāgotra, a resident of Nāḡpur: (*Vaidyaka*)*yogasārasamgraha*,¹²⁶² a short metrical treatise in four chapters: *vaidyaguṇāguṇa*, *bheṣajākhyānaśaṭkṛtīnāḍīmūtramalaparikṣā*, *rogagaṇanā*, and *bheṣajaparikrama*.

Sources mentioned are Caraka, Hārta, Sūśruta, Vāgbhaṭa, and *Vaidyasāraka*.¹²⁶³

TUḷḷŪRU ŚARABHARĀJU: *Śarabharājīya*. This work, written in Telugu and influenced by the *Basavarājīya*, may date from the seventeenth century.¹²⁶⁴ Tuḷḷūru's son, Mādhava, completed the treatise left incomplete by his father and wrote a medical work in Sanskrit, called *Gadāsamjīvanī*.

UDAYAMKARA: *Sārakalikā*.¹²⁶⁵

UDAYARUCI: *Vaidyavallabha*.¹²⁶⁶

UDDHAVAMIŚRA, son of Himakara: *Vaidyapradīpa*, a work on all the aspects of medicine.¹²⁶⁷

UPĀDHYĀYA of the Sārasvatakula: *Cikitsājñāna*.¹²⁶⁸

UPENDRAMIŚRA: *Bhaiṣajyārasāmṛtasamhitā*.¹²⁶⁹ This work is one of the sources of the *Rasayogasāgara*.

URAGENDRA BHŪPĀLA: *Parimalapārijāta*.¹²⁷⁰

VĀDHŪLA RĀMĀNUJA: *Āyurvedadharmaśāstra*.¹²⁷¹

VĀGBHAṬA ĀTREYIN: *Kvāthaśataka*.¹²⁷²

VAIDYANĀTHA: *Kalyāṇagunaratnākara*.¹²⁷³

VAIDYANĀTHA: *Nirṇayanighaṇṭu*.¹²⁷⁴

VALLABHADEVA: *Yogamuktāvalī*.¹²⁷⁵

VALLABHENDRA or VALLABHĀCĀRYA or INDRAKANṬHAVALLABHĀCĀRYA was the author of the *Vaidyacināmaṇi*.¹²⁷⁶

The *Vaidyacināmaṇi*¹²⁷⁷ is divided into chapters called *vilāsa* or *prakaraṇa*.¹²⁷⁸

Edition d gives the text of the first 137 verses, which, after a maṅgala and two stanzas on the author, deal with the following subjects: the contents of the work: *nidāna*, *lakṣaṇa*, *rasayogāḥ*, *kaṣāyakāḥ* (4); *aṣṭasthānaparikṣā*: *nāḍī*-, *sparsāna*-, *svārūpa*-, *śabda*-, *netra*-, *purīṣa*-, *mūtra*-, and *jihvāparikṣā* (6–28); *ajīrṇa* (29–31);¹²⁷⁹ fever caused by one or two doṣas (32–51); *bhūtajvara* (52–53); *ajīrṇajvara* (54–55);

abhighātajvara (56–57); aihikajvara (58–63); dvyāhikajvara (64–65); tryāhikajvara (66–67); cāturthika (68–70); pañcāhikajvara (71–72); pakṣāntajvara (73–74); māsāntajvara (75–76); varṣāntajvara (77–78); sarvakārajvara (79–80); asthigatajvara (81); raktagatajvara (82); māmsagatajvara (83); saṃnipātajvara (84–89);¹²⁸⁰ tāntrikajvara (90–92); the formula of bhūtabhairavarasa (93–95); a list of eighty vāta diseases (96–105);¹²⁸¹ the symptoms of some of these disorders: pakṣaghāta, pārśvavāta, kampavāta, ūruvāta, sandhivāta, and kikkānila (106–112); the symptoms of kṣīṇavāta (113), dhūmākhayavāta (114), rasavāta (115), and dhanurvāta (116); the influence of the nakṣatras on diseases (117–123); recipes against fevers and some other diseases (124–129); karmavipāka (130–135); a recipe (136–137).

Sources mentioned in the introduction are Caraka, Suśruta and *Cakradatta*.¹²⁸²

Ed. e, which is complete, is divided into twenty-six vilāsas, mostly subdivided into prakaraṇas (chapters).¹²⁸³

Chapter one deals with aṣṭasthānaparīkṣā (1–4).¹²⁸⁴ The maṅgala is addressed to Śrīnātha, Pārvinātha, Vāṇinātha, Sarasvatī, Durgā, Vātuka,¹²⁸⁵ and Heramba.

Chapter two deals with: the five elements of rogavijñāna (knowledge concerning diseases): nidāna, pūrvarūpa, rūpa, upaśaya and saṃprāpti (5–6); interactions between diseases (6); a maṅgala to Śiva (6); four fevers are brought about by de gods: jvara, mahājvara, raudrajvara and vaiṣṇavajvara (7); patients suffering from these fevers should recite the names of Rudra, Mahārudra, Mahārudra again, and the two Mahārudras respectively (7); śītajvara as a result of karman (7); the religious treatment of śītajvara (7); eight measures able to cure fever: vedaśravaṇa (Veda study), hitacaraṇa (good conduct), viprasaṅtaraṇa (feeding brāhmaṇas), kṣṇasmarana (mental recitation of the name of Kṛṣṇa), śubhakarana (auspicious actions), dravyaviśrāṇa (the bestowal of gifts), aśvatthabhramaṇa (the circumambulation of an aśvattha tree), suratnadharana (the wearing of auspicious gems), and dīnasamrakṣaṇa (protection of the distressed) (7); recitation of the names of a number of deities and paying homage to several deities are to be recommended (7); astrological influences and their warding off (7); the onset, prodromes, mythical origin, and varieties of fever (7–8); the characteristics of fever due to vāta, pitta, and kapha (8); the characteristics of fever due to vāta and pitta, vāta and kapha, kapha and vāta, pitta and kapha, kapha and pitta (9);¹²⁸⁶ the characteristics of ajīrṇajvara, abhighātajvara (9), bhūtajvara, āhikajvara (10); the varieties of āhikajvara: aikāhika, dvyāhika, tryāhika, caturthaka, pañcāhika, ārdhapakṣa, pākṣika, and māsika;¹²⁸⁷ these fevers are caused by the three doṣas (10); another series: saṃtata, satata, anyedyuṣka, tṛtīyaka, caturthaka, and cāturthikaviparyaya (10); fevers reaching the seven dhātus; three days are required for going from one dhātu to the next one (10); the characteristics of the seven fevers staying in rasa, rakta, etc. (10–11);¹²⁸⁸ the characteristics of viṣamajvara, mūrchājvara, śītajvara (11), doṣahetukajvara, antardāhajvara, viṣamaśītalajvara, āmajvara (12); the eight varieties of āgantukajvara (12): grahāveśajvara, auśadhajvara, viṣajajvara, jvara caused by bhaya (or bhī), śoka, kopa (or krodha), kāma, and abhicāra (12–13);¹²⁸⁹ factors causative of fever; things to be avoided; unwholesome things; the characteristics of strīsaṅgamadoṣa; the characteristics of viṣamadoṣa and viṣamaśītadoṣa (13), raktajihvaka-, pitajihvaka-, kṣṇajihvaka- and śvetajihvakadoṣa (13–14); these

seven doṣas may continue for seven days or a fortnight; rules for the regimen to be kept on each of the first nine days of a fever; the number of days a fever will take for reaching pāka, dependent on the doṣa(s) involved (14); rules regarding treatment during the early stage (14–15); a second series of characteristics of fever due to vāta, pitta, kapha (15), vāta and pitta (15–16), vāta and kapha, pitta and kapha, and vāta, pitta and kapha, together with their treatment (16); a second series of characteristics of bhūtāveśajvara and abhicārajvara, together with their treatment; the characteristics and treatment of daivaprakopajvara (17); the characteristics and treatment of bhītijvara (17–18), piśācājvara, gandharvajvara (18), tāndrikajvara, mūrchājvara, pralāpajvara (19), śītalajvara (19–20), svedajvara, kṛmijvara (20), haridrājvara (20–21), kāmajvara, prātaḥkārajvara, madhyāhñajvara (21), sāyamkārajvara (21–22), niśājvara, śoṣajvara, vraṇajvara (22), ātapajvara (22–23), svarahinajvara, abhighātajvara (23), āmajvara (23–24), agnimāndyajvara, vamanajvara, hidhmājvara (24), hikkājvara, anidrājvara, kāsajvara, rasagatajvara (25), raktagatajvara, māmsagatajvara, medogatajvara, asthigatajvara (26), majjagatajvara, śuklagatajvara,¹²⁹⁰ piṭakājvara (27), sphotakajvara, kampajvara, śophajvara (28), ānāhajvara (28–29), trikālajvara, saṃnipātajvara, purāṇajvara (29), śuṣkajvara, aikāhikajvara, dvyāhikajvara, tryāhikajvara (30), caturthikajvara, pañcāhikajvara, pakṣāntajvara, māsāntajvara (31),¹²⁹¹ and varṣāntikajvara (32).

The next section of chapter two¹²⁹² deals with āyurvedic preparations and rasayogas against fevers (32–54).

Chapter three¹²⁹³ deals with saṃnipāta fevers: the characteristics of saṃnipātajvara in general; the varieties to be distinguished; the symptoms of saṃnipātajvara with a predominance of vāta, pitta, kapha, vāta and pitta, vāta and kapha, pitta and kapha (55); the symptoms of six saṃnipāta fevers in which one doṣa is most, one moderately and one least excited; another classification of these fevers with thirteen varieties, seven of which are incurable; the symptoms of each of these fevers; two sets of symptoms of sandhika (56), antaka (56–57), hr̥ddāha, cittavibhrama, śītāṅga (57), tāndrika (57–58), kaṇṭhakubja; the symptoms of karṇika; the variety of karṇika called karṇamūlāśoṭha; two sets of symptoms of bhugnanetra; the symptoms of raktoṣṭha (58) and raktaṣṭhīvin; two sets of symptoms of pralāpa, jihvaka, and abhinyāsa; the six curable varieties (59); the seven incurable varieties (59–60); the time limit of each of the fevers; the characteristics of dhātupāka and malapāka (60).

The section on treatment (60–74) deals with āyurvedic preparations and rasayogas against saṃnipāta fevers.

Chapter four¹²⁹⁴ deals with: a maṅgala; the attendants (parivāra) of kṣaya as the king of the diseases; karmavipāka relating to kṣaya (75); prāyaścitta; astrological considerations; śānti measures; the four causes of the disease called yakṣman;¹²⁹⁵ the saṃprāpti of rājayakṣman,¹²⁹⁶ its prodromes (76);¹²⁹⁷ the symptoms of yakṣman due to vāta, pitta, kapha, vāta and pitta, vāta and kapha, pitta and kapha, saṃnipāta, and blood; the main symptoms of rājayakṣman;¹²⁹⁸ the eleven, six or three main symptoms (77);¹²⁹⁹ signs indicating curability or incurability;¹³⁰⁰ the varieties of śoṣa; the characteristics of śoṣa caused by sexual intercourse, grief, old age, travelling (78), physical exercise (78–79), and injuries;¹³⁰¹ the causes and symptoms

of uraḥkṣata;¹³⁰² signs indicating its incurability;¹³⁰³ cases of śoṣa amenable to treatment or unsuitable to it (79);¹³⁰⁴ a mythical tale about kṣayaroga in the form of a dialogue between Pārvaṭī and Śiva (79–80); śānti measures (80–81); details concerning the appearance of kṣaya in successive births (81); characteristics of kṣaya in general; the characteristics of raktakṣaya, rājayakṣman, saṃtāpakṣaya (82), mūrchākṣaya, śoṣakṣaya, vamanakṣaya, grahaṇīkṣaya, śophakṣaya (83), śuṣkakṣaya, atisārakṣaya, mandāgnīkṣaya, pāṇḍukṣaya (84), śūlakṣaya (84–85), kaphakṣaya, kāsakṣaya, śvāsakṣaya (85), tandrākṣaya (85–86), hidhmākṣaya, and haridrākṣaya (86).

The section on treatment (86–108) describes āyurvedic preparations and rasayogas.

Chapters five to nine deal with a number of diseases and their treatment. The descriptions of the diseases largely agree with the *Mādhavanidāna*. Verses on karmavipāka are added. Chapter five is about pāṇḍuroga. Chapter six, on kāmīlā and related disorders, adds that the image of the deity Kāmīlā should be honoured (124). Additional subjects of chapter seven, devoted to śopha, are the characteristics and treatment of pāṣaṇadoṣaśopha (132), vṛṇaśopha, jvaraśopha, khaḍgaghātaśopha (133), kāmīlāśopha, sarpadaśaśopha, and gandhakaśopha (134). Chapter eight, on atisāra and pravāhikā, adds a description of bhasrātisāra (139–140). Chapter nine, on grahaṇī, adds the characteristics of ghaṭīyantragrahaṇī (155).

Chapter ten,¹³⁰⁵ on vātavyādhī, begins with: a maṅgala; karmavipāka relating to vātavyādhī; general śānti measures; śānti of dhanurvāta, pakṣavāta (168), raktavāta, vātarakta, vātapitta; causes of vātavyādhī according to astrology; the importance of vāta (169).

The part that follows, up to the description of khallī (169–177), has largely been taken from the *Mādhavanidāna*.¹³⁰⁶ Some additional verses describe the organs forming part of the koṣṭha, the location of the āmāśaya (170), jṛmbhāvāta, pralāpavāta, rasājñāna, tvakśūnyatā (171), four varieties of ākṣepaka, due to vāta, pitta, kapha and a trauma (172), and the varieties of aridita due to vāta, pitta and kapha (174). The characteristics of tūnī and pratitūnī are absent.¹³⁰⁷

The section that follows is concerned with the symptoms of dhūmavāta, vidhūmavāta, śuṣkāṅgavāta, kaphavāta, jihvāṅgavāta, skandhavāta, kandharavāta, pādavāta, madhuvāta (177), bastivāta, kṣutavāta, śṛṅghalāvāta, visphoṭavāta, snāyuvāta, grdhra-vāta, pāṃśuvāta, skhalanavāta, śukravāta, sūtikāvāta, tvagvāta (178), bhogavāta, kikkasavāta, kaṭivāta, malabaddhavāta, mūtrabaddhavāta, ūruvāta, suptivāta, kampavāta, bāhukampa (179), śītavāta, sirāvāta, netravāta, nāsāvāta, mukhavāta, udaravāta, ku-kṣivāta, ajīṛṇavāta, amlavāta, anulomavāta, vilomavāta (180), dhanurvāta, pakṣaghāta, ardhaṅgavāta, pārśvavāta, ātapavāta, agnivāta, ādhyavāta, pāṇḍuvāta, svedavāta (181), sandhivāta, sādhyavāta, śirovāta, svarahīnavāta, raktavāta, kṣīṇavāta, khañjāvāta, kalā-vāta, sarvāṅgavāta, styānavāta, gulphavāta (182), āṅgulīvāta, jānuvāta, jaṅghāvāta, a-sthivāta, kākavāta, bhramaṇavāta, paṅguvāta, daṇḍavāta, mandavāta, koṣṭhavāta (183), gulmavāta, majjāvāta, kṣatavāta, vasāvāta, aṇuvāta, dadhivāta, kaṇavāta, ūrdhnavāta, āmavāta, badhīravāta, and unmādvāta (184).

Chapter eleven,¹³⁰⁸ on raktapitta, presents no unusual features.

Chapter twelve¹³⁰⁹ deals with: a list of the twenty-four pittarogas; the symptoms of these disorders: āvarṇapaittya, vivarṇapaittya, sūryāvartapaittya, kāmīlāpaittya (230), amlapitta (230–231; three different versions), raktapaittya, svedapaittya, unmādapaittya, puṇḍarikapaittya, bhujaṅgapaittya, karapādapaittya, śītapaittya (231), mūrchāpaittya (231–232), mādhyapaittya, kusumapaittya, krodhapaittya, bhraṃśapitta, śīraḥ-paittya, kṣudhāpaittya, tṛṣṇāpaittya, durbhāṣāpaittya, carmapitta, durgandhapitta, and mādanapitta (232).

Chapter thirteen,¹³¹⁰ concerned with arocaka, presents no unusual features.

Chapter fourteen,¹³¹¹ dealing with kāsa, enumerates and describes the twenty ka-pharogas: pūrvakāsa, kṣayakāsa, raktakāsa, cippikā(kāsa), vātakāsa, pittakāsa, kṣata-kāsa, śūktikā(kāsa), āmakāsa, pāṇḍukāsa, kṛṣṇakāsa, śleṣmakāsa, dadhikāsa, śleṣmajihvaka, kaṇṭhajihva, upajihva, jihvakakāsa, ūrdhvakāsa, śleṣmabhaṅga, and śleṣmaku-ṣṭhaka (248); it lists the symptoms of twenty varieties of kāsa, which are the same as the twenty kaphavikāras (249–251).

Chapters fifteen to seventeen,¹³¹² dealing with śvāsa, hikkā, and svarabheda, present no unusual features.

Chapter eighteen¹³¹³ deals with prameha and the pramehapitīkās (285–289). Subjects added are: the reason why prameha does not occur in women; the characteristics of bahumūtra; the ten kinds of pitīkā, which develop in prameha when neglected, are said to occur in sandhis, marmans and fleshy parts (288); complications of the pitīkās; the fourteen marmans are found between the brows, on the crown of the head, at the throat, at the śīraṣṭhala, in the region of the heart, at the navel, the eyes, testicles, ankles, buttocks, hips, big toes, forefingers, and roots of the arms; the examination of the urine of prameha patients and signs of prognostic significance (289).

Chapter nineteen,¹³¹⁴ concerned with mūtrakṛcchra, adds a purīṣaja type (301). Chapter twenty,¹³¹⁵ on mūtrāghāta, adds a second set of symptoms of vātakuṇḍalikā (307).

Chapters twenty-one (on āsmarī), twenty-two (on śūla), twenty-three (on udāvarta and ānāha), twenty-four (on gulma), twenty-five (on hṛdroga), twenty-six (on udara), twenty-seven (on vṛddhi and vardhma), and twenty-eight (on medoroga),¹³¹⁶ present no unusual features.

Chapter twenty-nine,¹³¹⁷ dealing with vātarakta, adds verses on pittarakta and kapharakta (371).

Chapters thirty (on ūrustambha), thirty-one (on āmavāta), thirty-two (on śītapitta, udarda, koṭha), and thirty-three (on amlapitta),¹³¹⁸ present no unusual features.

Chapter thirty-four¹³¹⁹ deals with agnimāndya, bhasmaka, ajīṛṇa, viṣūci, alasaka, daṇḍālasaka, and vilambikā (399–402), mainly on the lines of the *Mādhavanidāna*. Added are verses on bhasmaka (399–401), vātājīṛṇa and kaphājīṛṇa (400–401). The verses on viṣūci differ from those of the *Mādhavanidāna* and describe its general symptoms, those of the types due to vāta and kapha, the disorder called pārśnīdāha, which occurs in very serious cases of viṣūci, the complications of viṣūci, and signs pointing to incurability (401). Some more extra verses are about daṇḍālasaka (402).

Chapters thirty-five (on arśas), thirty-six (on kṛmīroga),¹³²⁰ thirty-seven (on tṛṣṇā), thirty-eight (on dāha), and thirty-nine (on mūrchā, tandrā, klama, nidrā, saṃnyāsa) do

not contain interesting additional material.

Chapter forty deals with madātaya (437–438). Its verses are taken from the *Mādhavanidāna*, but a number of stanzas found in that treatise are omitted.¹³²¹ A verse on the proper amount to be drunk for rasāyana purposes is added (438).

Chapters forty-one (on unmāda) and forty-two (on apasmāra) are devoid of noteworthy features.

Chapter forty-three¹³²² deals with kuṣṭha. Added verses are about vipādikā and vicarcikā (451–452), kacchūkuṣṭha, galatkuṣṭha, śvitra (452), prasūtikuṣṭha, curable and incurable types of kuṣṭha (453), incurable types of kilāsa and other forms of kuṣṭha (454), and the incurability of śvetakuṣṭha and śvitra (455).

Chapters forty-four (on visarpa) and forty-five (on visphoṭaka) present nothing unusual.

Chapter forty-six deals with masūrīkā. Additional verses are about the pathogenesis of the disease and the explanation of its name (480–481), the complications, the variety called śītaiā, the characteristics of brhati śītalā and kodrava(masūrīkā), and the varying degrees of curability of the disease (483). The section on treatment (483–487), of an āyurvedic type and not containing rasas, also describes the religious treatment of the disease and refers to the *Śītalāstotra* (485).

Chapter forty-seven (on galagaṇḍa) presents nothing unusual.

Chapter forty-eight, on gaṇḍamālā, presents a list of four varieties of this disorder, said to be caused by parasites (kṛmi) and located in the cardiac region, neck, cheeks (kapola) and head (uttamāṅga); it also lists four vṛṇas, found in the regions of the teeth, hips, ears, and shoulders (aṃsagaṇḍaka) respectively; the characteristics of gaṇḍamālā occurring on the scalp (kapāla) are described.

Chapters forty-nine (on granthi), fifty (on arbuda), and fifty-one (on ślipada) do not give additional material.

Chapter fifty-two, dealing with vidradhi, adds verses on stanavidradhi (500).

Chapters fifty-three (on vṛṇa), fifty-four (on agnidagdha), fifty-five (on āgantukavṛṇa), fifty-six (on nāḍivṛṇa), and fifty-seven (on bhagandara) present no unusual features.

Chapter fifty-eight deals with upadaṃśa. Additional verses describe the five varieties of upadaṃśa and their chief symptoms (523). Extra verses give details about liṅgavartis, which are found in both males and females, about their locations, their forms, and the symptoms they bring about (524).¹³²³

Chapter fifty-nine deals with śūkadoṣa.

Chapter sixty¹³²⁴ deals with the kṣudrarogas. Additional verses are about: the kulīra type of kunakha (532); the varieties of palita: due to vāta, pitta, kapha, saṃnipāta, and old age; the treatment of valī and palita by the administration of the drug called candrodāya; the type of baldness (keśanāśa) caused by parasites and its treatment with jayantikā (533); vaktrādurgandha, pulipiri (also called katipitika: 543), and chāyāroga (535). Gudabhraṃśa is omitted.

Chapter sixty-one¹³²⁵ deals with the pathogenesis and symptoms of snāyuroga, which is of five types: associated with vāta, pitta, kapha, blood, or all the doṣas (543–544).

Chapter sixty-two deals with mukharogas. Additional stanzas are about: the numbers of the groups of mukharoga, making a total of sixty-four; an enumeration of the eight oṣṭharogas (546) and sixteen dantaveṣṭarogas (= dantamūlarogas) (547); hanumokṣa; an enumeration of the five jihvāroga (548).

Chapter sixty-three deals with karṇarogas. Additional verses give an enumeration of the twenty-eight karṇarogas (558), the characteristics of karṇāntarvṛṇa, and the lethal complications of karṇaśūla (561).

Chapter sixty-four deals with nāsāroga. Additional verses are about: the aetiology of nāsāroga; an enumeration of the thirty-four nāsāroga (564); the aetiology of pīnasa; the seven varieties of pīnasa: red, yellow, white, dark-blue, hāridra, of a mixed colour, and bad-smelling (565); nāsārśas (567).

Chapter sixty-five deals with śīrorogas. Additional verses are concerned with the aetiology of the group of eleven śīrorogas (573).

Chapter sixty-six¹³²⁶ deals with netrarogas. Additional verses are about: the general pathogenesis of netrarogas; the numbers of the groups of netrarogas; their total number is ninety-four (581).

Chapter sixty-seven,¹³²⁷ a very long one, deals with the processing of inorganic substances, their medicinal properties and their uses.

Its subjects are: the seven metals; the purification of gold, the preparation of its bhasman, the medicinal properties, rules for the use of gold preparations, the bad effects of unpurified gold (602–603); the origin of silver, its names, its purification, etc. (604–605); copper, its origin, etc. (605–607); tin (607–609); lead (609–610); iron and maṇḍūra (611–616); kāmśya (616); pittala (616–617); the origin of mercury; its varieties (617); its praise (617–618); its names; the bad effects of looking down upon it (618); two versions of the eight doṣas and the disorders they may bring about (618–619); the seven kaṇṭukas and the disorders they may cause; the effects of purified and unpurified mercury (619); the purification of mercury and the eight saṃskāras (619–623); the preparation of ■ bhasman (623–624); the extraction of mercury from cinnabar (624); the preparation of rasasindūra and rules regarding its use (625); rules for the use of a bhasman (625–627); rasājīrṇa and its treatment; rasatāpa and its treatment (627); wholesome and unwholesome things during the use of mercurial preparations (627–628); sulphur, its origin, purification, etc. (628–630); mica (abhraka), its origin, purification, etc. (630–633); haritāla (633–635); añjana (635); kāsīsa (635–636); gairika (636); hiṅgula (636–637); manaḥśilā (637); the purification of śaṅkha (637); the colours of various bhasmans (637); rules regarding the use of bhasmans; substances for the killing of the metals; the disorders arising from the use of unpurified metals; the seven upadhātus and their origin (638); svarṇa- and tāmramākṣika (638–640), tutthā, rasaka, kaṅkuṣṭha, sindūra (640), ākhupāṣāṇa, raktapāṣāṇa (641); śilājatu (641–642); the eight sādhanārasas: kampilla, lavaṇa, gauripāṣāṇa, navasāgara, darada, vahnijāra, girisindūra, and muddāraśṛṅga; kampilla; bola; mastakī (642); kapharī; sarjaksāra; yavaksāra; the five salts (643); the purification of trikaṭuka, vāraṇapippalī (= gajapippalī), aphenā (opium), rāmaṭha (= hiṅgu), the two kinds of jīra, eraṇḍabīja and dantibīja, viṣamuṣṭi, nepāla, and viṣa (= vatsanābha) (644); the properties and uses of rasakarpūra; the nine ratnas; their

VENĪRĀMAŚĀKADVĪPIN: *Māṃsabhakṣaṇadīpikā*, a work in 500 verses, denouncing animal food. ¹³⁶⁴

VENKAṬĀCĀRYA, of Gautama gotra: ¹³⁶⁵ *Bṛhadvaidyaratnākara*. ¹³⁶⁶ This treatise is divided into a pūrvabhāga, containing eight taraṅgas, and an uttarabhāga, containing two taraṅgas.

The pūrvabhāga deals with the origin of āyurveda, aṣṭasthānaparīkṣā, and the nidāna of the diseases; the uttarabhāga is concerned with treatment of the diseases, rasāyana, vājīkaraṇa, the purification of inorganic substances, the application of leeches, etc.

The order of the diseases agrees partially only with that of the *Mādhavanidāna*. Each chapter on treatment begins with karmavipāka concerning the disease dealt with in the chapter and with propitiatory measures (śānti).

Many Smṛtis and Purāṇas are quoted in the work.

Veṅkaṭācārya may have lived in the eighteenth century or later. ¹³⁶⁷

VENKAṬEŚA: *Bālaparyāyamañjarī*. ¹³⁶⁸

VENKAṬEŚA: *Bheṣajakalpasamuccaya*. ¹³⁶⁹

VENKAṬEŚAKAVI: *Vaidyaśiromaṇi*. ¹³⁷⁰

VENKAṬEŚVARA: *Dakṣiṇāmūrtinighaṇṭu*, a work in six chapters (ullāsa). The author belonged to the Ellā- or Yallāpantulu family. ¹³⁷¹

VIDAGDHACŪḌAMAṆI: *Pañcāśannighaṇṭusāra*. ¹³⁷²

VIJAYA, a Jain upādhyāya, was the author of a compilatory work called *Kalyāṇakāraka* or *Vaidyasārasaṃgraha*. ¹³⁷³ It is based on the works of Hārīta, Rudradeva, Suśruta, Vāgbhaṭa, and others. The treatise contains formulae deriving from Pūjyapāda and Samantabhadra. Some verses on nāḍīparīkṣā and other subjects are said to have been borrowed from the *Merudadaṇḍatantra*. ¹³⁷⁴

VIJAYAKRṢṆA: *Sārasaṃgraha*. ¹³⁷⁵

VINĀYAKA: *Guṇasāstra*. ¹³⁷⁶

VĪRABHADRA: *Vaidyacintāmaṇi*. ¹³⁷⁷

VĪRAKRṢṆA, son of Gopīdevī and Rāghava, pupil of Sudarśanayati: *Kāyacikitsālu*. ¹³⁷⁸

VĪRARĀJA: *Vīrarājoktivilāsa*. ¹³⁷⁹

VĪREŚVARA: *Rogārogaśāstra*. ¹³⁸⁰

VĪREŚVARĀNANDA, pupil of Hariharānanda: *Yogaratanākara*. ¹³⁸¹

VIŚĀLAKĪRTI: *Ārogyacintāmaṇi*. ¹³⁸²

VIŚVANĀTHA, son of Padmanābha: *Bālacandraprakāśa*. ¹³⁸³

VRAJABHŪṢAṆA: *Guṇaratnākara*. ¹³⁸⁴

VRAJARĀJA: *Meghavinoda*. ¹³⁸⁵

VṚṢAGIRINĀTHA: *Dravyakalpabhūṣaṇa*. ¹³⁸⁶

VYĀSAPAṆḌITA: *Arkaprakāśa*. ¹³⁸⁷

YĀŚOVĪRA: *Avyaktasaṃgrahaṇa*. ¹³⁸⁸

Chapter 4

Various anonymous works

ABHIDHĀNARATNAMĀLĀ.¹ABHINAVACINTĀMAṆĪ.²ABHINAVACINTĀMAṆISĀRA.³ABHINYĀSACIKITSĀ.⁴ĀGADARĀJARATNA.⁵ĀGNĪKARMAṆ.⁶ĀGNIMĀNDYACIKITSĀ.⁷ĀGNIPURĀṆA.⁸ Material of medical interest is found in a number of chapters.⁹

Chapter 140 describes drugs and some other articles used in vaśya (subjugation), etc. Their names are: adhaḥpuṣpā, bhṛṅgarāja, gorakṣa, karkatī, kṛṣṇadhustūra, kṛtāñjali, kumārī, lajjālukā, mayūraśikhā, meṣaśṛṅgī, mohalatā, putrañjīva, rudantikā, rudrajatā, sahadēvī, sitārka, snuhī, and viṣṇukrāntā (1–2).

Chapter 141 enumerates thirty-six plants and other drugs used in making men immortal (amarīkaraṇa): akṣya, balā, bhṛṅga, bilva, dhanyāka, dhātṛī, eraṇḍa, gokṣuraka, guḍūcī, haridrā, haritakī, javānikā, jīraka, kaṇṭakārī, khadira, kṛtamāla, kṣāra, marīca, muṇḍī, nimba, parpaṭa, pippalī, pippalīśiphā,¹⁰ punarnavā, rucaka, saindhava, śatamūlī, śatapūṣpī, siddhārtha, sindhuvāraka, śuṇṭhī, vaca,¹¹ vacā, vahnī,¹² vāsaka, and viḍaṅga (2–5). The items to be employed for particular purposes are specified. Among these purposes are the elimination of diseases due to deranged vāta, pitta and kapha (12–14), disorders caused by grahas (15), etc.

Chapter 229 describes auspicious and inauspicious dreams.¹³

Chapter 246 deals with the examination of gems (ratnaparīkṣā). Gems to be worn by a king are: candrakānta, gandhaśasyaka, indranīla, jyotīrasa, karketana, mahānīla, marakata, mauktika, padmarāga, pulaka, puṣparāga, sphāṭika, sūryakānta, vaidūrya, and vajra (1–3ab). This list is followed by a second one (3cd–6); some of the gems of this second list are: bhallātaka, girivajra, gomeda, pīlu, pravālaka, rājapaṭṭa,¹⁴ rudhirākṣa, and saugandhika. Several types of pearls are mentioned (12–13).

Chapters 279 to 286 contain a medical treatise, expounded by Dhanvantari to Suśruta.¹⁵ Chapter 282 deals with vṛkṣāyurveda.¹⁶ Chapter 285 is remarkable in giving an account of Ātreya's teachings on siddhayogas, as reported by Dhanvantari.

Chapters 294, 295 and 298 are concerned with snake-bites, the bites of other poisonous animals, and their treatment.

Chapter 299 is about disorders in children caused by demonic beings.¹⁷

Chapter 370 is concerned with anatomy.¹⁸

ĀHĀRAVARJYĀVARJYAPADĀRTHĀḤ.¹⁹ĀJĪRṆAKAṢĀYAVIDHĀNA.²⁰ĀJĪRṆAMAṆJARĪ.²¹ĀJĪRṆANIDĀNA.²²ĀJĪRṆAUṢADHI.²³

THE AKṢIROGANIRMŪLANA,²⁴ concerned with the treatment of eye diseases, and said to form the ninety-fourth chapter of the *Sanatkumārasaṃhitā* of the Pāñcarātrāgama,²⁵ passes for teachings given by Sanatkumāra to Nārada.²⁶ The types of treatment described in this text are said to have met with success in the case of Bṛhadratha, son of Pāribhadra, king of Kāśī.²⁷

The *Sanatkumārasaṃhitā* is quoted by Hemādri and therefore earlier than the thirteenth century.²⁸ Passages from it have been identified among the quotations in Yāmūnācārya's *Āgamaprāmāṇya*, which dates from the tenth century.²⁹

ĀLOKĀMṚTA.³⁰ĀMARAVINODA.³¹ĀMAVĀTACIKITSĀ.³²ĀMAYACIKITSĀ.³³ĀMLAVETASANIRŪPAṆA.³⁴ĀMṚTAMAṆJARĪ.³⁵ĀNANDAKHAṆḌA.³⁶ANANTAGHṚTA.³⁷ANḌAROGANIDĀNACIKITSĀKRAMA.³⁸ANĠGAVIDYANIDĀNA.³⁹AṆJANAVIDHI.⁴⁰AṆKOLAKALPA.⁴¹AṆKOLATAILAVIDHI.⁴²AṆKOLATAILOTPĀDANAVIDHI.⁴³ANNAPĀNAVIDHI.⁴⁴ANUBHAVASĀRA.⁴⁵ANUBHAVASIDDHARASĀYANA.⁴⁶ANUPĀNADADHI.⁴⁷APASMĀRAROGA.⁴⁸APHENANIRŪPAṆA.⁴⁹ĀRDRĀMALAKAPRAYOGA.⁵⁰ĀRIṢṬANAVANĪTA.⁵¹ĀRIṢṬANIDĀNA.⁵²ĀROGYACINTĀMAṆĪ.⁵³ĀROGYAMĀLĀ.⁵⁴ĀROGYAPĪYŪṢA.⁵⁵ĀROGYASNĀNAVIDHI.⁵⁶ARŚACIKITSĀ.⁵⁷ĀRṢAVIDYĀNUŚĀSANA.⁵⁸

ARŚOROGANIDĀNA.⁵⁹
 ARUṆAKERĀMRATATAILĀ.⁶⁰
 ASĀDHYAŚĪTAPRATIKĀRA.⁶¹
 ASĀDHYAVILAKṢAṆA.⁶²
 ĀSAVĀDHĪKĀRA.⁶³
 ĀŚCARYAMAHODADHI.⁶⁴
 AŚĪTIVĀTANIDĀNA.⁶⁵
 AŚĪTIVĀTAROGANIDĀNA.⁶⁶
 AŚMARĪCIKITSĀ.⁶⁷
 AŚMARIROGANIDĀNA.⁶⁸
 ASṚGDARAROGĀDĀNANIDĀNACIKITSĀ.⁶⁹
 AṢṬĀDAŚAKUṢṬHALAKṢAṆACIKITSĀ.⁷⁰
 AṢṬAGANDHALAKṢAṆA.⁷¹
 AṢṬĀNGACIKITSĀ.⁷²
 AṢṬĀNGAHRDAYADRAVYAVIJṆĀNA.⁷³
 AṢṬĀNGAHRDAYASAMGRAHA.⁷⁴
 AṢṬĀNGAKĀṆDA.⁷⁵
 AṢṬAPARĪKṢĀ.⁷⁶
 AṢṬASTHĀNAPARĪKṢĀ.⁷⁷
 AṢṬAVIDHAŚOBHĀVYĀDHICIKITSĀ.⁷⁸
 ĀSURĪKALPA.⁷⁹
 ĀSURĪRĀJIKĀKALPA.⁸⁰
 AŚVAGANDHĀDICŪRṆA.⁸¹
 AŚVAGANDHĀKALPA.⁸²
 AŚVAGANDHĀMUSALĪVIJAYĀKALPA.⁸³
 AŚVAGANDHIBĀLĀKṢĀTAILANIRMĀṆAKRAMA.⁸⁴
 AŚVAGANDHIGHṚTA.⁸⁵
 AŚVAGANDHIGHṚTAVIDHĀNA.⁸⁶
 AŚVINĪKUMĀRAVAIDYASĀSTRA.⁸⁷
 ATHARVANIGHAṆTU.⁸⁸
 ATISĀRACIKITSĀ.⁸⁹
 ATISĀRACIKITSĀKRAMA.⁹⁰
 ATISĀRĀDIROGĀVICĀRA.⁹¹
 ATISĀRALAKṢAṆA.⁹²
 ATISĀRAPRATĪKĀRA.⁹³
 ATISĀRAVARṆANA.⁹⁴
 ATISĀRAVAṬAKAVIDHĀNA.⁹⁵
 ĀTMARAKṢAṆĀRTHANĪTĪ.⁹⁶
 ĀTREYASAMHITĀSĀRA.⁹⁷
 ĀTREYASĀRASAMGRAHA.⁹⁸
 ĀTREYAVĀGYOGA.⁹⁹
 ĀTURAPARĪKṢĀ.¹⁰⁰
 AUṢADHA.¹⁰¹
 AUṢADHACIKITSĀ.¹⁰²

AUṢADHACIKITSĀNUPĀNAVIDHĀNA.¹⁰³
 AUṢADHAGRAHAṆAPĀKAVIDHI.¹⁰⁴
 AUṢADHAGRANTHA.¹⁰⁵
 AUṢADHAGUṆAPĀṬHA.¹⁰⁶
 AUṢADHAJĀRAṆAMĀRAṆAVIDHI.¹⁰⁷
 AUṢADHAJĀNĀNATATSAMGRAHAṆAKĀLAPRAYOGAVIDHĀNA.¹⁰⁸
 AUṢADHAKALPA.¹⁰⁹
 AUṢADHAKALPASAMŪHA.¹¹⁰
 AUṢADHAKARAṆAPRAKĀRA.¹¹¹
 AUṢADHANĀMĀNI.¹¹²
 AUṢADHANIGHAṆTU.¹¹³
 AUṢADHANIRMĀṆACIKITSĀVIDHĀNA.¹¹⁴
 AUṢADHANIRMĀṆACIKITSĀVIDHI.¹¹⁵
 AUṢADHANIRMĀṆAVIDHI.¹¹⁶
 AUṢADHANIYAMA.¹¹⁷
 AUṢADHAPĀKĀDHĪKĀRA.¹¹⁸
 AUṢADHAPĀKĀVALĪ.¹¹⁹
 AUṢADHAPĀKAVIDHI.¹²⁰
 AUṢADHAPALLAVA or -pallavī.¹²¹
 AUṢADHAPATTRIKĀ.¹²²
 AUṢADHAPRAKRIYĀ.¹²³
 AUṢADHAPRASTUTAKARAṆA.¹²⁴
 AUṢADHAPRATINIDHĪKALPANĀ.¹²⁵
 AUṢADHAPRAYOGA.¹²⁶
 AUṢADHAPRAYOGAKĀRIKĀ.¹²⁷
 AUṢADHARASĀYANA.¹²⁸
 AUṢADHĀRṆAVA.¹²⁹
 AUṢADHASĀDHANA.¹³⁰
 AUṢADHASAMGRAHA.¹³¹
 AUṢADHASAMGRAHA, TANTROKTA-. See *Tantroktauṣadhasamgraha*.
 AUṢADHASĀRANIRŪPANĀ.¹³²
 AUṢADHAVIDHĀNA.¹³³
 AUṢADHAVIDHI.¹³⁴
 AUṢADHAYOGA.¹³⁵
 AUṢADHAYOGAGRANTHA.¹³⁶
 AUṢADHAYOGĀḤ.¹³⁷
 AUṢADHAYOGAMAHĀRATNĀKARA.¹³⁸
 AUṢADHAYOGAMAHĀRATNĀVALĪ.¹³⁹
 AUṢADHAYOGARATNĀKARA.¹⁴⁰
 AUṢADHAYOGASAMGRAHA.¹⁴¹
 AUṢADHIGRANTHA.¹⁴²
 AUṢADHIKALPA.¹⁴³
 AUṢADHIKOṢA.¹⁴⁴
 AUṢADHILAKṢAṆA.¹⁴⁵

AUṢADHIMANTRAKALPĀDI.¹⁴⁶
 AUṢADHINĀMAMĀLĀ.¹⁴⁷
 AUṢADHINĀMĀNI.¹⁴⁸
 AUṢADHINĀMĀVALĪ. See *Auṣadhināmamālā*.
 AUṢADHIPRATINIDHISAMGRAHA.¹⁴⁹
 AUṢADHIRASĀYANAKALPA.¹⁵⁰
 AUṢADHISAMGRAHA.¹⁵¹
 AUṢADHIVARGA.¹⁵²
 AUṢADHIYANTRATANTRA.¹⁵³
 AUṢADHYĀDINĀMĀVALĪ.¹⁵⁴
 ĀVALEHASAMGRAHA.¹⁵⁵
 ĀVARTANĪKĀKODUMBARATAILANIRMĀṆAVIDHI.¹⁵⁶
 ĀYUḤPRAMĀṆA.¹⁵⁷
 ĀYURDĀYĀDHYĀYA.¹⁵⁸
 ĀYURVEDA.¹⁵⁹

The ĀYURVEDĀBDHISĀRA¹⁶⁰ is an anonymous treatise,¹⁶¹ compiled from various sources.

The first part of this work consists of 4433 verses, accompanied by a commentary, probably by the same author. It deals with the nidāna and treatment of the diseases as arranged in the *Mādhavanidāna*, from jvara up to visarpa.¹⁶² The verses on nidāna are largely taken from Mādhava's work, although their order sometimes differs. The second part, containing verses 4434 to 9909, is concerned with the nidāna and treatment of the remaining diseases,¹⁶³ largely arranged again in agreement with the *Mādhavanidāna*. The nidāna verses are mostly from that work; sometimes a few stanzas are added.¹⁶⁴ The order of the diseases in the second part disagrees to some extent with their arrangement in the *Mādhavanidāna*.¹⁶⁵ Diseases added are snāyuka (4490–4504), phiraṅga (4505–4576),¹⁶⁶ śītalā (4577–4650), somaroga (5804–5820), mūtrātisāra (5821–5823), and klaiḥya (6226–6540). The chapters on the diseases and their treatment are followed by sections on vājīkaraṇa and rasāyana.

The remaining part of the *Āyurvedābdhisāra* is devoted to a variety of subjects: weights and measures (6541–6569); technical rules, the meaning of technical terms, netraparīkṣā (6707–6711), nāḍīparīkṣā (6712–6723), mūtraparīkṣā (6724–6731), anatomy (6863–6924), pharmacological terms (6958–7016), sneha and sveda (7017–7076), pañcakarman (7077–7242), dhūmapāna (7243–7264), etc. This long section on general subjects is followed by a nighaṇṭu (7339–8798), a rather elaborate section on alchemy (8799–9562), and, finally, a chapter on karmavipāka and religious means of counteracting diseases resulting from bad acts in previous lives (9563–9903).

Sources of verses incorporated in the work are: Agniveśa (9372–77), Baudhāyana (9725; 9791–96; 9798–9802; 9812–18), Bhāluki (163), Bhoja (3459; 3502; 3521; 3531; 3651–52; 4459; 4696), Cakra (112), *Cakradatta* (179), Caraka (often), Dhanvantari (584), *Dr̥ḍhabala* (69), *Gaurīmata* (9434), *Gayadāsa* (70), *granthāntara* (6907), *Guṇagrantha* (9103), *Hārīta* (2626–27ab; 3648; 9368–69), *Kāmasāstra* (3992), *Karavīra* (615), *Kāśyapa* (1002), *Kāśyapasamhitā* (5645), *Kharanāda* (113; 893), *Madanapāla*

(192), *Mahābhārata* (9682), *Padmapurāṇa* (9584–90), *Rasakalitalikā* (348), *Rasapaddhati* (9060; 9101–02; 9148), *Rasasamketakalikā* (806–807), *Rasavāgbhaṭa* (9136), *Rasendrakośa* (982; 1020),¹⁶⁷ *Śātātāpīya* (9719), *Śaunaka* (6997), *Suśruta* (often), *tantrāntara* (often), *Tisāṭha* (6656–58), *Uśanaśa* (3094), *Vāgbhaṭa* (often), *Videha* (586; 4861–63; 5034; 5055), *Vṛddhagautama* (9804–09; 9873–78), *Vṛddhapārāśara* (9592), *Vṛddhasuśruta* (117–118; 2627c–f), and *Yogacandrikā* (8821–22).

Sources quoted or referred to in the commentary are: *Āyurvedaprakāśakṛt* (8887; 9024), *Bāṣpacandra* (11–12; 2798–99), *Bhāluki* (66; 99), *Bhāṭṭārahāricandra* (2812), *Bhāvamiśra* (3160–65), *Bhoja* (610; 1745; 3511; 4150; 4699; 4703; 4712–13; 5427; 5947), *Cakra* (62–67; 1242–44),¹⁶⁸ *Cakradatta* (183), *Caraka* (often), *Dhanvantari-yanighaṇṭu* (183), *Gadādhara* (1320; 3300–02; 4983; 4987), *Gayadāsa* (2812; 2931), *Hārīta* (57–58; 102–105; 610; 1235), *Harivaṃśa* (30–33ab), *Īśāna* (62; 3098), *Jejjāta* (39; 50–51; 62; 120; 1004; 1242–44, twice; 1317; 1324; 1392–93; 1426; 2053; 2087; 2520; 2812), *Kārttika* (57–58; 154; 1320; 1401–02; 4983; 4987), *Kārttikakuṇḍa* (39), *Kīrtikuṇḍa* (97), *Kṣīrapāṇi* (2812),¹⁶⁹ *Madanapāla* (4221), *Mādhavācārya* (3915), *Madhukośa* (4979), *Madhukośakṛt* (117–118; 1256–58; 1401–02; 1742–43; 1751; 2033–34; 2083; 2427; 2656–57; 3098; 3460; 3994; 4072–73; 4654; 4665; 4693; 4699; 4703; 5030; 5291; 5292; 5296; 5633; 5751), *Parāśara* (610), *prācīnāḥ* (2905–07), *Rasapaddhatikṛt* (9184), *Rasapradīpa* (1273–74), *Suśruta* (often), *tantrāntara* (often), *Tisāṭha* (183), *Vāgbhaṭa* (often), *Vangasena* (183), *Vaśiṣṭhasamhitā* (6869), *Vātsyāyana* (4061), *Videha* (102–105; 5006; 5051; 5360; 5485), *Viśvaparakāśa* (6227), *Vṛddhabhoja* (1605), and *Yogapayodhi* (1409).¹⁷⁰

One series of thirteen saṃnipāta fevers is described (71–86), namely the series beginning with sandhiga and ending with abhinyāsa; by far the larger part of the verses are practically identical with those found in the *Bhāvaprakāśa*, but their source is not indicated; the verse enumerating the symptoms of antaka is from some unknown treatise. Most of the verses on the treatment of these fevers (337–389) form part of the *Bhāvaprakāśa* as well. The same applies to those on the therapy of complications of fevers (506–540). A fever, dealt with in the *Āyurvedābdhisāra* but not mentioned in other sources, is mundhārajvara (553–554).

The uparasas distinguished are: gandhaka, hiṅgula, abhraka, tālaka, manahśilā, añjana, taṅkaṇa, rājāvarta, cumbaka, sphutikā, śaṅkha, khaṭikā, gairika, kāsisa, rasaka, kapardikā, vālūkā, bola, kaṅkuṣṭha, and saurāṣṭrī (8861). Additional uparasas, also called sādhabhāṇarasas, are: samudraphena, kṣudrasaṅkha, muktāśukti, jalaśukti, mṛttikā, agnijāra, and girisindūra (9027–40).

Three series of metals (dhātu) are mentioned: (1) svarṇa, tāra, āra (brass), tāmra, nāga, vaṅga, and tīkṣṇaka; mercury (pārada) is sometimes added to this series (9041); (2) svarṇa, tāra, tāmra, the two metals called paṅgu,¹⁷¹ rīṭikā, ghoṣa (= pañcaloha), and loha (9042); (3) suvarṇa, rūpyaka, tāmra, raṅga, yasada, śīsaka, and loha (9043). Metals described are: gold (9049–92), silver (9093–9110), copper (9111–36), tin (9137–66), zinc (9167–70), lead (9171–84), and iron (9185–9264); maṇḍūra is added (9265–78).

The upadhātus are: tāpya, vimalā, tuttha, kāmśya, pittala, sindūra, and śailaniryāsa (9046). Another series of upadhātus consists of: abhraka, māksika, tāla, śilā, nīlāñjana, tutthaka, and rasaka (9048). Upadhātus described are: svarṇamāksika (9279–

94), tāmākṣika (9295–9301), tuttha (9302–14), bhūnāga (9315–21), kāmśya and pitāla (9322–41), bharta (= pañcaloha or pañcarasa) (9342–46), sindūra (9347–52), and śilājatu (9353–92).¹⁷²

The usual nine gems (ratna) are dealt with (9402–31). The uparatnas described are: vaikrānta, sūryakānta, candrakānta, peroja, karpūramaṇi,¹⁷³ kāca, and dugdhapāṣāṇa (9432–49).

Two series of upaviṣas are listed: (1) arka, sehuṇḍa, dhātūra, lāṅgālī, karavīraka, guñjā, ahiphena (9547–48); (2) arka, lāṅgālī, guñjā, hayāri, viṣamuṣṭi, jaipāla, unmatta, ahiphena, bhaṅgā (9550).

Some noteworthy names of drugs are ākulakṛt (380)¹⁷⁴ and kulīñja (380). The commentary mentions not infrequently substitutes for rare drugs¹⁷⁵ and vernacular names of medicinal plants and diseases.¹⁷⁶

Variants of the text are also noticed by the commentator.¹⁷⁷

The commentator appears to be particularly indebted to the authors of the *Madhu-kośa*.

The *Āyurvedābhisāra* is later than the *Bhāvaprakāśa*¹⁷⁸ and *Āyurvedaprakāśa*, which are quoted, and earlier than A.D. 1796, the date of completion of its MS.¹⁷⁹

ĀYURVEDACINTĀMAṆI.¹⁸⁰

ĀYURVEDĀGAMA.¹⁸¹

ĀYURVEDĀGAMANA.¹⁸²

ĀYURVEDAGRANTHA.¹⁸³

ĀYURVEDALAKṢAṆĀDHYĀYA.¹⁸⁴

ĀYURVEDAPARIBHĀṢĀ.¹⁸⁵

ĀYURVEDAPRADĪPA.¹⁸⁶

ĀYURVEDAPRAKĀŚA.¹⁸⁷

ĀYURVEDĀRTHAPRAKĀŚA.¹⁸⁸

ĀYURVEDĀRTHASĀRA.¹⁸⁹

ĀYURVEDASAṂGRAHA.¹⁹⁰

ĀYURVEDASĀRA.¹⁹¹

ĀYURVEDASĀRASAMGRAHA.¹⁹²

ĀYURVEDASARVASVĀSĀRASAMGRAHA.¹⁹³

ĀYURVEDASARVASVĀSĀRASAMGRAHA. A treatise preserved in the Tibetan Tanjur.¹⁹⁴ The Tibetan title is *Čheñi rig-byed mthañ-dag-gi sñiñ-po bsdus-pa*.¹⁹⁵ This work is described as a collection of extracts from the treatises of ten famous ācāryas, arranged by the Tibetan physician Dar-mo sman-rams-pa Blo-bzan chos-grags (Sumatidharmakīrti)¹⁹⁶ and dge-slon Hjam-dbyaṅs grags-pa (bhikṣu Mañjughoṣakīrti);¹⁹⁷ the translator was the brāhmaṇa (chañs-sras) Bśad-paḥi rdo-rje.¹⁹⁸ of Za-hor,¹⁹⁹ who was assisted by the great translator Lhun-grub (Nirābhoga).²⁰⁰ The Tibetan text was written in the Potala.²⁰¹

This treatise consists of a number of heterogeneous tracts dealing with the aetiology of diseases, the examination of the pulse,²⁰² hygiene, therapy,²⁰³ a dialogue between Śiva and Pārvaṭī, formulae of collyria and caustics, yantras and mantras, etc.²⁰⁴

ĀYURVEDAŚĀSTRAVAIDYAKAGRANTHA.²⁰⁵

ĀYURVEDAŚLOKASAMGRAHA.²⁰⁶

ĀYURVEDASUDHĀNIDHI.²⁰⁷

ĀYURVEDASŪTRA.²⁰⁸ This highly interesting text is the only one so far known that aims at integrating āyurveda and a form of yoga. It is written in sūtra style and comprises 1,252 sūtras, arranged in sixteen chapters (praśna).

Chapter one deals with āma as the source of all diseases (1.8–9), the six tastes (1.40), the transformation (pāka) of three of these tastes by the digestive fire (1.41–46),²⁰⁹ the digestive fire (pācakapitta; 1.48) located in the organ called grahaṇī (1.50), and with fever as a disease caused by weakening of the grahaṇī (1.51–54). Five types of fever are described, namely the vāta, vātapitta, vātakapha, kaphapitta, and āgantū types (1.55–59),²¹⁰ and the signs of release from fever (1.61–65). The statement about the corruption of the grahaṇī as the main cause of diseases is repeated (1.64). The chapter proceeds with statements on the rasas and doṣas, the five mahābhūtas, the vessels (sirā), and the three guṇas, i.e., sattva, rajas and tamas.

Chapter two is concerned with anatomy (2.1–8), bloodletting (2.46–48), fertility, and pregnancy (2.50–69), but in particular with thirty-five lotuses (padma) thought to be present in the human body (2.9–44); each of these lotuses is connected with a specified number of vessels and one or two letters of the alphabet.²¹¹ Towards the end of the chapter (2.71) it is said again that an increase of āma is the cause of all disorders.

Chapter three is about yoga; it quotes, without referring to the source, the *Yogasūtra*.²¹² The teachings on yoga found in the *Āyurvedasūtra* differ in many respects from those of the *Yogasūtra*²¹³ and may have been influenced by some commentators on the latter work, in particular Bhoja²¹⁴ and Rāmānandasarasvatī.²¹⁵ The author lays much emphasis on dietetics as a prerequisite for attaining liberation. He states that sweet foods promote sāttvika, acid foods rājasa, and pungent (kaṭu, ūṣaṇa) foods tāmasa qualities in the human being; consequently, a person striving for liberation should restrict himself to sweet articles of diet (3.7–10). As in almost each of the chapters, it is stressed that the removal of āma is the foremost principle of any treatment (3.33).

Chapter four is about the application of yoga, as described in chapter three, to medicine. By means of yoga one attains nourishment (poṣaṇa) of the dhātus, resulting in health, as opposed to decline (śoṣaṇa) of the dhātus, which leads to a diseased state. Some diseases and their varieties are described, in particular udara (4.17–27),²¹⁶ pāṇḍuroga 4.28–32, and vātavyādhi (4.33–36), as well as some relationships between tastes and dhātus (4.40–42).²¹⁷

Chapter five deals with relationships between tastes and doṣas (5.1–11), the qualities of the five mahābhūtas (5.16), curability and incurability of diseases (5.27–31), relationships between tastes and dhātus (5.44–49),²¹⁸ and various other subjects.²¹⁹

Chapter six opens with a third series of relationships between tastes and dhātus (6.1–7).²²⁰ Other topics of this chapter are the duration of diseases and their curability or incurability ((6.23–36), and the properties of various types of milk (6.88–92). The importance of ajīrṇa as a cause of other diseases is emphasized (6.39).

Some of the subjects of chapter seven are: the properties of various types of grain

(7.21–29) and inauspicious dreams (7.68–70). The role of āma as a cause of disorders is stressed again (7.54, 58, 59). Chapter eight is, among other things, about types of trees (8.18–22), the śodhana and śamana types of treatment (8.43–48), rules for the regimen to be observed during day and night, and general rules for a virtuous and healthy life (8.54–104). Chapter nine deals with units of time, from lava to saṃvatsara (9.9–26), the months of the year,²²¹ and the regimen to be observed during the various seasons.

Chapter ten describes the properties and actions of a series of medicinal substances.²²²

Chapters eleven and twelve, concerned with yoga, are borrowed from the *Yogasūtra*.²²³ Chapter thirteen contains many statements on āma and on diseases resulting from its presence in the body (13.6, 7, 10, 11); it has also sūtras on the relationships between the rasas and the seven dhātus.²²⁴ Chapter fourteen enumerates the twenty-seven nakṣatras, together with the letters of the alphabet and the lotuses of the parts of the body with which they are connected.²²⁵ The same chapter contains a list of diseases bound up with the nakṣatras (14.36–62), and the first part of a list of the deities to be worshipped when one suffers from one of these diseases (14.63–87). Chapter fifteen continues the latter list (15.1–62); the remaining part is devoted to the therapy of some diseases. Chapter sixteen is entirely about the treatment of diseases.

The pharmaceutical preparations chiefly used are cūrṇa, taila and leha (15.65, 68, 73); kvāthas (15.65, 68, 73) and ghṛtas (15.73) are sporadically prescribed. The treatise ends with some basic principles of āyurveda.

The most conspicuous feature of the *Āyurvedasūtra* is the attempt at integrating āyurveda and a particular form of yoga that shows Tantric influence. The six cakras of Tantric yoga are referred to (4.49), although not described; the first of these cakras, called mūlādhāra, is mentioned (4.49), as well as the two main nāḍis, Iḍā and Piṅgalā (4.48 and 51). The emphasis on dietetics as a means for attaining yoga calls for attention, as well as the central role of āma and ajīrṇa as causative factors in diseases. The old names of the months of the year and the list of twenty-seven nakṣatras are also noteworthy.²²⁶

Nothing is known with any certainty about the date of composition of the *Āyurvedasūtra*. The style does not prove it to be an ancient work. The use of the old names of the months, the list of twenty-seven nakṣatras, and the absence of any mention of the nine planets do not convincingly point to an early date. The form of yoga described may show that the author was acquainted with Rāmānandasarasvatī's commentary on the *Yogasūtra*. Tantric influences are clearly visible as well. The sources used by the author in describing the properties and actions of medicinal substances cannot be identified.

The commentary on the *Āyurvedasūtra*, written by Yogānandanātha, reaches up to sūtra fifty-one of chapter five. It seems probable that the author regarded his work as completed since the commentary ends with a benedictory verse. The remaining sūtras may have been considered to be less important, or have even been added later.

Yogānanda may have belonged to the school of Rāmānandasarasvatī, the disciple of Govindānandasarasvatī and author of the *Maṇiprabhā* commentary on the *Yogasūtra*,²²⁷ who lived about A.D. 1600²²⁸ or in the beginning of the seventeenth century.²²⁹

Sources are rarely referred to by name in the commentary. A *Bheṣajakalpa* is mentioned once (ad 3.17). The *Aṣṭāṅgahṛdayasamhitā* is profusely quoted.²³⁰ Also quoted are the *R̥gveda* (ad 4.52), *Taittirīyabrāhmaṇa* (ad 4.14), and Māgha's *Śiśupālavadha* (ad 1.33).

ĀYURVEDAVIDYAKĀŚIRĀJAGRANTHA.²³¹

ĀYURVEDAVIJÑĀNA.²³²

ĀYURVEDOKTAPRAYOGA.²³³

ĀYURVEDOTPATTI.²³⁴

ĀYURVĀDDHI.²³⁵

BAHUMŪTRĀDĪCĪKITSĀ.²³⁶

BAHUMŪTRAROGACĪKITSĀ.²³⁷

BAHURŪPAKALPA.²³⁸

BĀKUCĪKALPA.²³⁹

BĀLABODHA.²⁴⁰

BĀLACĪKITSĀ.²⁴¹

BĀLACĪKITSĀ or *Bālarogādhikāra*.²⁴²

BĀLACĪKITSĀMṚTA.²⁴³

BĀLACĪKITSĀPADDHATI.²⁴⁴

BĀLACĪKITSĀPAṬALA.²⁴⁵

BĀLAGRAHACĪKITSĀ.²⁴⁶

BĀLAGRAHACĪKITSĀTANTRA.²⁴⁷

BĀLAGRAHACĪKITSĀVIDHI.²⁴⁸

BĀLAGRAHACĪKITSĀYANTRĀṆI.²⁴⁹

BĀLAGRAHAHARAVIDHI or *Navagrahaśānti*.²⁵⁰

BĀLAGRAHANĀŚANAMANTRAYANTRA.²⁵¹

BĀLAGRAHAROGACĪKITSĀVIDHI.²⁵²

BĀLAGRAHAŚĀNTI.²⁵³

BĀLAGRAHAŚĀNTI or *Bālarakṣāvidhi*.²⁵⁴

BĀLAGRAHAŚĀNTIPRAYOGA.²⁵⁵

BĀLAGRAHASTAVA.²⁵⁶

BĀLAGRAHASTAVA.²⁵⁷

BĀLAGRAHASTAVARĀJA.²⁵⁸

BĀLAGRAHAVIDYASĀRA.²⁵⁹

BĀLAGRAHAVIDHĀNA.²⁶⁰

BĀLAGRAHAYOGAŚĀNTI.²⁶¹

BĀLAGRAHAYOGAŚĀNTIVIDHI.²⁶²

BĀLAJVARĀDĪCĪKITSĀ.²⁶³

BĀLAKABODHINĪ.²⁶⁴

BĀLĀMAYACĪKITSĀ.²⁶⁵

BĀLAROGACĪKITSĀ.²⁶⁶

BĀLAROGĀDHĪKĀRA.²⁶⁷

BĀLAROGAHAVIDHĀNA.²⁶⁸

BĀLĀTAILAVIDHĀNA.²⁶⁹

BĀLATANTRA or *Cikitsākalikā*.²⁷⁰
 BĀLAVAIDYA.²⁷¹
 BALĪSIDDHĀNTA.²⁷²
 BĀLOPACĀRAṆĪYA.²⁷³
 BHAIṚAVAPRASĀDA.²⁷⁴
 BHAIṚAJAKALPA.²⁷⁵
 BHAIṚAJYA.²⁷⁶
 BHAIṚAJYARATNĀVALĪ.²⁷⁷
 BHAIṚAJYASĀRASAMUCCAYA.²⁷⁸
 BHAIṚAJYAVASTUNICAYAGUṆOPAYOGANIRṆAYA.²⁷⁹
 BHAIṚAJYAVIDHĀNA.²⁸⁰
 BHAKṢAṆAVIKĀRA.²⁸¹
 BHALLĀTAKAKALPĀDIYOGASAMGRAHA.²⁸²
 BHALLĀTAKAPĀKA.²⁸³
 BHALLĀTAKARASĀYANAVIDHI.²⁸⁴
 BHALLĀTAKĪCŪRṆAVIDHI.²⁸⁵
 BHĀRASAMBHĀRA.²⁸⁶
 BHĀRATASĀRASAMGRAHA.²⁸⁷
 BHĀVACINTĀMAṆI.²⁸⁸
 BHĀVĀRTHADĪPIKĀ.²⁸⁹
 BHEṢAJAJNĀNAMĀLĀ.²⁹⁰
 BHEṢAJAKALPASAMGRAHA.²⁹¹
 BHEṢAJAKALPASAMUCCAYA.²⁹²
 BHEṢAJAKALPASĀRA.²⁹³
 BHEṢAJAKALPASĀRASAMGRAHA.²⁹⁴
 BHEṢAJANĀMAMĀLĀ or *Dravyanirṇayanighaṇṭu*.²⁹⁵
 BHEṢAJARAHASYA.²⁹⁶
 BHEṢAJASAMHITĀ.²⁹⁷
 BHEṢAJASARVASVA.²⁹⁸
 BHEṢAJATANTRA.²⁹⁹
 BHEṢAJATARKA.³⁰⁰
 BHEṢAJĀVALOKA.³⁰¹
 BHIṢAGĀNANDA.³⁰²
 BHIṢAGGRANTHAMĀLIKĀ.³⁰³
 BHIṢAGRATNAMĀLĀ.³⁰⁴
 BHIṢAGRATNAMĀLIKĀ.³⁰⁵
 BHIṢAGUTSAVA.³⁰⁶
 BHIṢAKCAKRANIDĀNA.³⁰⁷
 BHIṢAKCINTĀMAṆI.³⁰⁸
 BHOGALAKṢAṆA.³⁰⁹
 BHOGYADRAVYAGUṆAṆIṢAYA.³¹⁰
 BHOJANAHITĀHITAVICĀRA.³¹¹
 BHOJANAKASTŪRĪ.³¹²
 BHOJANAŚĀSTRA.³¹³

BHRGVĀDICŪRṆAVIDHĀNA.³¹⁴
 BHRṆGĀMALAKATAILANIRMĀṆAKRAMA.³¹⁵
 BHRṆGARĀJAKALPA.³¹⁶
 BHŪKADAMBAKALPA.³¹⁷
 BHUVANASĀRA.³¹⁸
 BILVĀDILEHYANIRMĀṆAVIDHI.³¹⁹
 BILVALEHYANIRŪPAṆA.³²⁰
 BRĀHMAṆABHAIṚAJYAKARAṆANIRṆAYA.³²¹
 BRAHMĀṆḌAKALPA.³²²
 BRĀHMĪGHṚTA.³²³
 BRĀHMĪRASĀYANAVIDHI.³²⁴
 BRHACCIKITSĀSĀRA.³²⁵
 BRHADAGNIKUMĀRAKA.³²⁶
 BRHADBHAIṚAJYAKALPA.³²⁷
 BRHADBHEṢAJAKALPA.³²⁸
 BRHADVAIDYAPRASĀRAKA.³²⁹
 BRHADVAIDYASĀRA.³³⁰
 BRHAJJĪRAKĀDIMODAKA.³³¹
 BRHATĪKALPA.³³²
 CAKRĀṆKAKALPA.³³³
 CAKRAŚEṢA.³³⁴
 CAKRATATTVA.³³⁵
 CAMATKĀRACINTĀMAṆI.³³⁶
 CAMATKĀRANIGHAṆṬU.³³⁷
 CĀMUṆḌIKĀLAGHUNIGHAṆṬU.³³⁸
 CANDRĀRKATĀRAKA.³³⁹
 CANDRODAYA.³⁴⁰
 CANDRODAYAMĀTRĀVIDHĀNA.³⁴¹
 CANDRODAYAPRAKĀṢA.³⁴²
 CANDRODAYAVIDHĀNA.³⁴³
 CAṆKA.³⁴⁴
 CATUṢṢAṢṬIUVARANIDĀNA.³⁴⁵
 CATUṢṢAṢṬIVYĀDHIHARAUṢADHANIRŪPAṆA.³⁴⁶
 CATURDĀŚAROGANIDĀNA.³⁴⁷
 CATURDĀŚAROGANIDĀNANIRŪPAṆA.³⁴⁸
 CHILARAVAIYAPUSTAKA.³⁴⁹
 CIKITSĀ.³⁵⁰
 CIKITSĀCANDRIKĀ.³⁵¹
 CIKITSĀCINTĀMAṆI.³⁵²
 CIKITSĀCINTĀMAṆIMĀLĀ.³⁵³
 CIKITSĀDARPAṆA.³⁵⁴
 CIKITSĀDĪPIKĀ.³⁵⁵
 CIKITSĀGRANTHA.³⁵⁶
 CIKITSĀGRANTHASĀRA.³⁵⁷

CIKITSĀKALIKĀ. ³⁵⁸
 CIKITSĀKRAMA. ³⁵⁹
 CIKITSĀKRAMAUṢADHANIRMĀNAVIDHI. ³⁶⁰
 CIKITSĀMAHĀRṆAVA. ³⁶¹
 CIKITSĀMĀLATĪMĀLĀ. ³⁶²
 CIKITSĀMĀLIKĀ. ³⁶³
 CIKITSĀMAÑJARĪ. ³⁶⁴
 CIKITSĀMRṬA. ³⁶⁵
 CIKITSĀMRṬADARPAṆA. ³⁶⁶
 CIKITSĀMRṬASĀGARA. ³⁶⁷
 CIKITSĀMŪLA. ³⁶⁸
 CIKITSĀNGAPARIBHĀṢĀSAMGRAHA. ³⁶⁹
 CIKITSĀÑJANA. ³⁷⁰
 CIKITSĀPADDHATĪ. ³⁷¹
 CIKITSĀPARIBHĀṢĀ. ³⁷²
 CIKITSĀPARIKARAVIVARAṆA. ³⁷³
 CIKITSĀPHALANIRNĀYAKANAKṢATRAVIVARAṆA. ³⁷⁴
 CIKITSĀPRADĪPA. ³⁷⁵
 CIKITSĀPRAKARAṆA. ³⁷⁶
 CIKITSĀPRAKĀṢĀ. ³⁷⁷
 CIKITSĀPRAYOGA. ³⁷⁸
 CIKITSĀRATNA. ³⁷⁹
 CIKITSĀRATNĀKARA. ³⁸⁰
 CIKITSĀRATNASAMGRAHA. ³⁸¹
 CIKITSĀRṆAVA. ³⁸²
 CIKITSĀSĀGARA. ³⁸³
 CIKITSĀSAMBANDHA. ³⁸⁴
 CIKITSĀSAMGRAHA. ³⁸⁵
 CIKITSĀSAMUCCAYA. ³⁸⁶
 CIKITSĀSĀRA. ³⁸⁷
 CIKITSĀSĀRAKAUMUDĪ or *Sārakaumudī*. ³⁸⁸
 CIKITSĀSĀRASAMGRAHA. ³⁸⁹
 CIKITSĀSĀRASAMGRAHĀNUKRAMAṆIKĀ. ³⁹⁰
 CIKITSĀSĀRASAMUCCAYA. ³⁹¹
 CIKITSĀSĀRODDHĀRA. ³⁹²
 CIKITSĀSARVASĀGARA. ³⁹³
 CIKITSĀSARVASAMGRAHA. ³⁹⁴
 CIKITSĀŚĀSTRA. ³⁹⁵
 CIKITSĀSTHĀNA. ³⁹⁶
 CIKITSĀSUDHĀ. ³⁹⁷
 CIKITSĀTANTRA. ³⁹⁸
 CIKITSĀVIDHĀNA. ³⁹⁹
 CIKITSĀVIDHI. ⁴⁰⁰
 CIKITSĀVIṢAYA. ⁴⁰¹

CIKITSĀYOGA. ⁴⁰²
 CIKITSĀYOGAŚATA. ⁴⁰³
 CIKITSĀYOGAŚATAKA. ⁴⁰⁴
 CIKITSITA. ⁴⁰⁵
 CIKITSOPĀYA. ⁴⁰⁶
 CIKITSYACIKITSAKAPARĪKṢĀLAKṢAṆAVIDHI. ⁴⁰⁷
 CIṆCĀDILEHYAKARAṆAKRAMA. ⁴⁰⁸
 CIṆCĀSĀṆKAVATĪVIDHI. ⁴⁰⁹
 CINTĀMAṆI. ⁴¹⁰
 CITRAKĀDITAILA. ⁴¹¹
 CITRAKAKALPA. ⁴¹²
 COPACĪNĪGUṆA. ⁴¹³
 COVACĪNĪSEVANAVIDHI. ⁴¹⁴
 COVACĪNYĀDICŪRṆA. ⁴¹⁵
 CŪRAṆAGIRI. ⁴¹⁶
 CŪRṆĀDHĪKĀRA. ⁴¹⁷
 CŪRṆĀDIVIDHĀNA. ⁴¹⁸
 CŪRṆALEHYAKARAṆA. ⁴¹⁹
 CŪRṆALEHYAKRAMA. ⁴²⁰
 CŪRṆĀNI. ⁴²¹
 CŪRṆASAMGRAHA. ⁴²²
 CŪRṆASAMUDĀYA. ⁴²³
 CŪRṆAVIDHĀNA. ⁴²⁴
 CŪRṆAVINODA. ⁴²⁵
 CŪTĀSTHILEHYAVIDHĀNA. ⁴²⁶
 DAKṢIṆĀMŪRTINIGHAṆTU. ⁴²⁷
 DAKṢIṆĀVARTASĀṆKHAKALPA. ⁴²⁸
 DĀMPATYASAUKHYAVṚDDHIKARARASĀYANAVIDHĀNA. ⁴²⁹
 DĀMPATYOPAYOGIVAIDYAKĪYAVICĀRA. ⁴³⁰
 DANTARASANĀROGACIKITSĀ. ⁴³¹
 DAŚAPARĪKṢĀ. ⁴³²
 DAŚAPARVA. ⁴³³
 DAŚAVIDHAPĀKA. ⁴³⁴
 DĀTAPUṢṬA. ⁴³⁵
 DATTĀTREYAMATA. ⁴³⁶

DATTĀTREYATANTRA: ⁴³⁷ a treatise on ṣaṭkarman, written in the form of a dialogue between Śiva and Dattātreya. ⁴³⁸

The work consists of about 700 verses and some prose, arranged in thirty chapters (paṭala). The contents of the chapters are listed as follows (1.14–17): māraṇa and mohana (2), stambha (3 and 4), vidveṣa (5), uccāṭana (6), vaṣī (7 to 9), ākarṣaṇa (10), indrajāla or kautuka (11), yakṣiṇī (mantrasādhana) (12), rasāyana (13), (mr̥tyu)kā-lajñāna (14), anāhāra (15), atyantāhāra (16), nidhidarśana (17), vandhyāputravatīyoga or vandhyāgarbhadhāraṇa (18), mr̥ta (vatsāsuta)jīvitva (19), kākavandhyāputrakaraṇa

(20), vivāḍavijaya (21), vājīkaraṇa (22), strīdrāvaṇa (23), vīryastambhana (24), liṅgavardhanādiyoga (25), keśarañjana (26), keśapātana (27), bhūtagrahanivāraṇa (28), grahaḍoṣapīḍānivāraṇa (29), and siṃhavyāghrasarpavṛścīkādhayanāśana (30). Of some medical interest are chapters thirteen to sixteen, eighteen to twenty, twenty-two, and twenty-four to twenty-eight.

Earlier works, referred to in the introductory stanzas, are: *Amṛteśvaratantra*,⁴³⁹ *Dāmaratantra*, *Kākacandēśvarī* (*matatantra*),⁴⁴⁰ *Merutantra*, *Rādhātāntra*,⁴⁴¹ *Tārātāntra*,⁴⁴² and *Uddiśatantra*.⁴⁴³

DAVANAGRANTHA.⁴⁴⁴

DEHALAKṢAṆA.⁴⁴⁵

DEHATATTVANIRŪPA.⁴⁴⁶

DEŚALAKṢAṆĀNI.⁴⁴⁷

DEVADĀLĪKALPA.⁴⁴⁸

DEVĀṆJANA.⁴⁴⁹

DEVEŚVARĀDIṢṬĀNIYAMASA HITAGAṆAPATISAMUDRAPHALAPRAYOGA. This anonymous work, preserved in the Tibetan Tanjur under the title of *Lha-dbañ-phyug-gis chogs-bdag-la gnañ-baḥi sa-mu-dra pha-laḥi shyor-ba kha-bsgyur dan bcas-pa*, was translated by Nag-dbañ phun-čogs Lhun-grub.⁴⁵⁰

DEVĪNIGHAṆṬU.⁴⁵¹

DEVĪYĀMALA.⁴⁵² Quoted in the *Rasakāmadhenu*. Mentioned among the sources of the *Pāradasamhitā*.

DHAMANIPRAKĀŚA.⁴⁵³

DHANAṆJAYANIGHAṆṬU.⁴⁵⁴

DHANVANTARI.⁴⁵⁵ A comprehensive treatise on generalities, nidāna and treatment, partly composed in the form of a dialogue between a teacher (Dhanvantari) and Śiva, addressed as Īśvara and Maheśvara.⁴⁵⁶

Chapter (prakāśa) one: a series of maṅgalas, addressed to Gaṇeśa, Sarasvatī, Śiva, and Śrīkṛṣṇa (1–4); the pādacatuṣṭaya (5–9); omīna relating to the messenger (10–11); śakunas (12–13); aṣṭasthānaparīkṣā (14); nāḍīparīkṣā (15); mūtraparīkṣā (16); malaparīkṣā (17); jihvāparīkṣā (18); śabdaparīkṣā (19); sparśaparīkṣā (20); rūpaparīkṣā (21); drṣṭīparīkṣā (22); concluding verse (23); auspicious dreams (24); inauspicious dreams (25); kālajñāna (26); deśajñāna (the three types of country; 27–30); kṣetrajñāna, as expounded by Śiva (the four types of soil: brāhma, kṣātra, vaiśya, śaudra; 31–35); the properties of substances originating from these soils (36); the deities governing these soils are, according to the teaching of Umāvallabha (= Śiva): Brahmā, Śakra (= Indra), Kinnara, and Īśa (37); the five types of soil: pāṭhiva, āpya, taijasa, vāyavīya, and āntarikṣa (38–42); the properties of products from these soils (43); the deities governing these soils are: Brahmā, Viṣṇu, Rudra, Īśvara, and Sadāśiva (44); the mythical origin of trees from amṛta drops, fallen from

the pitcher snatched by Garuḍa (45); the four kinds of trees, dependent on the type of soil on which they grow (46); the characteristics of brāhmaṇa, kṣatriya, vaiśya and sūdra types of trees (47); the three types of medicinal substances: doṣapraśamana, dhātupraduṣṭa, svasthavṛttahita (48); the three types of substances called jāṅgama, audbhida and pāṭhiva (49); substances belonging to these three groups (50–52); the characteristics of male, female and napuṃsaka plants; their properties and uses (53); hunger, thirst and sleep occur in plants too;⁴⁵⁷ the folding together (saṃkoca) of leaves is typical of sleep (54); the composition of plants in the terms of the five mahābhūtas (55); the parts of plants and the substances they contain (56); weights and measures according to the māgadha (57) and kāliṅga (58) systems.

The remaining part of the treatise is devoted to the diseases and their treatment, followed by two chapters on rasāyana and vājīkaraṇa. Each disease is discussed in two chapters: one on nidāna and one on treatment.

The order of the chapters is in general agreement with the *Mādhavanidāna*. The chapters on treatment contain many rasayogas and lohayogas.

The verses on nidāna reproduce in general the *Mādhavanidāna*. Material from other sources is added here and there,⁴⁵⁸ while a number of stanzas accepted by Mādhava are left out. The order of the verses may vary too.

The chapter on jvara begins with a maṅgala addressed to the Pañcāna form of Śiva. It describes tandra as a dangerous complication of saṃnipātajvara (jvaranidāna 18). The names of the thirteen saṃnipāta fevers are: sandhika, antaka, rugdāha(ka), citta(vi)bhrāma, śītāṅga or śītāgātra, tandrika, kaṇṭhakubja, karṇaka, bhugnanetra or bhugnadṛś, raktaṣṭhivīn, pralāpaka, jihvaka, and abhinyāsa (jvaranidāna 20). The duration of each of these fevers is mentioned (jvaranidāna 21). Six among them are curable: sandhika, tandrika, karṇaka, kaṇṭhakubjaka, jihvaka, and cittavibhramśa; the remaining seven run a lethal course (jvaranidāna 22). The descriptions of the symptoms of each of these fevers (jvaranidāna 23–35) agree with those found in the *Yogarātnākara*. Two different verses on dhātupāka occur (jvaranidāna 15 and 38); the verse on doṣapāka occurs twice (jvaranidāna 16 and 39). Śīta- and dāhajvara are dealt with twice (jvaranidāna 51 and 52). Jīṇajvara is characterized (jvaranidāna 68). Two verses are devoted to gambhīrajvara (jvaranidāna 72–73). Many verses deal with signs indicating a fatal outcome (jvaranidāna 74–80). The fevers called madhurajvara and kṛṣṇamadhurajvara are described (jvaranidāna 83–84). The chapter on the treatment of fevers also deals with jvarātisāra (jvararogacikitsā 153–160). The chapter on the nidāna of atisāra describes four types of pravāhikā: due to vāta, pitta, kapha and blood (atisāranidāna 18). The chapter on the nidāna of pāṇḍuroga, etc., describes pānakti (pāṇḍukāmalādiroganidāna 11). Chapters on the nidāna and treatment of somaroga are inserted between those on prameha and medoroga. The chapters on the nidāna and treatment of vṛṇa deal with śārīra- and sadyovṛṇa. The chapter on the treatment of upadamaśa mentions phiraṅgaroga (upadamaśarogacikitsā 20, 22, 23, 24, 25) and prescribes rasakarpūra (upadamaśarogacikitsā 20). The chapters on yonivyāpatti also discuss mūḍhagarbha. A chapter on rasopadravas (hazards of using mercurial products) and vāridoṣa (disorders caused by corrupted water) is inserted between those on rasāyana and vājīkaraṇa. The chapter on vājīkaraṇa includes prescriptions

for stambhana, drāvaṇa and vaṣikaraṇa, as well as puṣpanivāraṇa.

An unusual name of a disorder is saṃgrahakoṣṭhadoṣa (vājīkaraṇa 15).

One of the names of opium, a repeatedly prescribed substance, is āphiṇḍa (vājīkaraṇa 46).

Religious elements are not infrequent at all in the prescriptions.⁴⁵⁹

The author does not reveal his name in the introductory stanzas; concluding verses are entirely absent.

The description of aṣṭasthānaparīkṣā points to a date later than Cāmuṇḍa's *Jvaratimirabhāskara*. The references to phiraṅgaroga and its treatment indicate that the *Dhanvantari* is later than Bhāvamiśra.

DHANVANTARICIKITSĀRṆAVA.⁴⁶⁰

DHANVANTARIGRANTHA.⁴⁶¹

DHANVANTARIGUṆĀGUṆAYOGAŚATA.⁴⁶²

DHANVANTARIKAVACA.⁴⁶³

DHANVANTARIPĀṆCAKA.⁴⁶⁴

DHANVANTARISAMHITĀ.⁴⁶⁵ Quoted in the *Pāradasaṃhitā*.

DHANVANTARISIDDHĀNTAŚIROMAṆI.⁴⁶⁶

DHANVANTARITANTRAŚIKṢĀ.⁴⁶⁷

DHANVANTARĪYAPATHYĀPATHYA.⁴⁶⁸

DHĀRĀKĀLPA.⁴⁶⁹

DHĀTRĪMAṆJARĪ.⁴⁷⁰

DHĀTUNIDĀNA.⁴⁷¹

DINACARYĀ.⁴⁷²

DINACARYĀPADDHATI.⁴⁷³

DIVĀKARASAMHITĀ.⁴⁷⁴

DIVYANIGHANṬA.⁴⁷⁵

DIVYASIDDHĀNĪJANA.⁴⁷⁶

DIVYAUṢADHĪKĀLPA.⁴⁷⁷

DIVYAUṢADHINĀMAMĀLĀ.⁴⁷⁸

DIVYAUṢADHIPRAKARAṆA.⁴⁷⁹

DIVYAUṢADHIPRAKĀŚA.⁴⁸⁰

DIVYAUṢADHIVARṆANA.⁴⁸¹

DOHADAPRAKĀRA.⁴⁸²

DOHADAPRAKĀŚA.⁴⁸³

DOṢĀDIVIJÑĀNĪYĀDHYĀYA.⁴⁸⁴

DRĀKṢĀDIKAŚĀYAVIDHĀNA.⁴⁸⁵

DRĀVYĀBHIDHĀNA.⁴⁸⁶

DRĀVYACIHNA.⁴⁸⁷

DRĀVYAGUṆA.⁴⁸⁸

DRĀVYAGUṆA or *Satkanṭharatna*.⁴⁸⁹

DRĀVYAGUṆABHĀṢĀ.⁴⁹⁰

DRĀVYAGUṆĀBHIDHĀNA.⁴⁹¹

DRĀVYAGUṆĀDARŚANIGHANṬU.⁴⁹²

DRĀVYAGUṆĀDHIRĀJA.⁴⁹³

DRĀVYAGUṆAKALPAVALĪ.⁴⁹⁴

DRĀVYAGUṆĀKARA.⁴⁹⁵

DRĀVYAGUṆAKOŚA.⁴⁹⁶

DRĀVYAGUṆAMUKTĀVALĪ.⁴⁹⁷

DRĀVYAGUṆANIRŪPAṆA.⁴⁹⁸

DRĀVYAGUṆA(PARĪ)BHĀṢĀ.⁴⁹⁹

DRĀVYAGUṆAPĀṬHA.⁵⁰⁰

DRĀVYAGUṆARATNĀVALĪ.⁵⁰¹

DRĀVYAGUṆASAMGRAHA.⁵⁰²

DRĀVYAGUṆASAMKALANA.⁵⁰³

DRĀVYAGUṆAŚATAKA.⁵⁰⁴

DRĀVYAGUṆĀVALĪ.⁵⁰⁵

DRĀVYAGUṆAVIMARŚA.⁵⁰⁶

DRĀVYAGUṆAVIVEKA.⁵⁰⁷

DRĀVYALAKṢAṆA.⁵⁰⁸

DRĀVYAMUKTĀVALĪ.⁵⁰⁹

DRĀVYANĀMAGUṆAKATHANA.⁵¹⁰

DRĀVYANĀMANIRŪPAṆA.⁵¹¹

DRĀVYANIRNAYANIGHANṬU.⁵¹²

DRĀVYANĪSCAYASĀRASAMGRAHA.⁵¹³

DRĀVYANĪSCAYASĀRASAMGRAHAGUṆAPĀṬHA.⁵¹⁴

DRĀVYAPADĀRTHAPRATINIDHI.⁵¹⁵

DRĀVYAPARĪKṢĀ.⁵¹⁶

DRĀVYAPARYĀYAGUṆĀKARA.⁵¹⁷

DRĀVYAPRAKĀŚA.⁵¹⁸

DRĀVYARATNĀKARA.⁵¹⁹

DRĀVYARATNĀKARA(NIGHANṬU).⁵²⁰

DRĀVYARATNĀLAMKĀRA.⁵²¹

DRĀVYARATNĀVALĪ or *-ratnāvalī*.⁵²²

DRĀVYASAMGRAHA.⁵²³

DRĀVYASĀRASAMGRAHA.⁵²⁴

DRĀVYASĀRASVABHĀVA.⁵²⁵

DRĀVYASIDDHI.⁵²⁶

DRĀVYASUDDHI.⁵²⁷

DRĀVYASUDDHIKRAMA.⁵²⁸

DRĀVYASUDDHIVICĀRA.⁵²⁹

DRĀVYAVAIŚEṢIKA.⁵³⁰

DRĀVYĀVALĪNIGHANṬU.⁵³¹

DRĀVYAVINIRŪPAṆA.⁵³²

DUGDHAPĀNAVIDHI.⁵³³

DUḤKHĀRI.⁵³⁴

DŪTĀDHYĀYA.⁵³⁵

DŪTALAKṢAṆANIRŪPAṆA.⁵³⁶

DŪTAPARĪKṢĀ.⁵³⁷
 DVĀDAŚĀRTHANIRŪPAṆA.⁵³⁸
 DVĀDAŚAVĀRŚIKACIKITSĀ.⁵³⁹
 EKADRAVYAVINIŚCAYA.⁵⁴⁰
 EKĀKṢANĀLIKERAKALPA.⁵⁴¹
 EKĀKṢARĪNIGHAṆṬU.⁵⁴²
 EKAMŪLIKĀPRAYOGA.⁵⁴³
 ELEYĀṆKOLAKRṢṆONMATTACŪRṆAVIDHĀNA.⁵⁴⁴
 ERAṆḌAKALPA.⁵⁴⁵
 ERAṆḌAPRAŚNA.⁵⁴⁶
 GADANIGRAHA.⁵⁴⁷
 GADANIRṆAYA.⁵⁴⁸
 GADĀṆKUŚA or *Sarvajvaracikitsā*.⁵⁴⁹
 GADARĀJARATNA.⁵⁵⁰
 GADAVINODANIGHAṆṬU.⁵⁵¹
 GAṆANIGHAṆṬU.⁵⁵²
 GAṆAPĀTHA.⁵⁵³
 GAṆAPĀTHACIKITSĀKALIKĀ.⁵⁵⁴
 GĀṆAPATYA.⁵⁵⁵
 GAṆḌAMĀLĀDICIKITSĀ.⁵⁵⁶
 GANDHAKALPA.⁵⁵⁷

GANDHAVĀDA,⁵⁵⁸ an anonymous treatise on cosmetics and perfumery (*gandhayukti* or *gandhasāstra*).

The treatise consists of ninety-three units, mostly comprising one to seven Sanskrit verses, accompanied by a Marāṭhī commentary. One unit (82) is devoid of a commentary; several units (17–18, 24–43, 59–76, 80, 86–93) are not accompanied by Sanskrit verses; two units consist of *dohā* verses in Marāṭhī. The treatise ends with a table of contents.⁵⁵⁹

The *Gandhavāda* gives a number of recipes of fragrant preparations for diverse uses. The commentary specifies the ratios of the ingredients and contains a translation of part of the Sanskrit verses.

Sources are not indicated; a few verses, however, agree literally with verses from Gaṅgādhara's *Gandhasāra*.⁵⁶⁰

Many of the preparations described are intended for use at a royal court.⁵⁶¹ A not inconsiderable number of them are provided with names; some are said to have been invented by divine authorities or kings.⁵⁶² The author incorporated a large number of formulae for the substances called *bukā* (units 10 and 24–42)⁵⁶³ and *javādi* (units 5, 20–22, 46, 48).⁵⁶⁴ The substances described were not only used as cosmetics and perfumes, but also to counteract diseases (units 23, 51, 77), for the purpose of *vaśīkaraṇa* (units 2 and 12), and for causing confusion in adversaries (*mohana*; unit 3).

Vernacular names of ingredients are rather common in the formulae.⁵⁶⁵

Noteworthy names of ingredients are: *ambara* (1, 4, 44, 45, 46, 48, 52, 55, 58, 78, 83, 84); *berī* (47, 50, 51, 52, 53, 54, 77, 84); *berikā* (55, 56, 83); *dāracīnī* (commentary

40 and 41); *geru* (2); *kabāba* (5); *khobara* (commentary 45); *lobāna* (very often, e.g., 1, 4–6, 10, 21–23, 44–47); *mastaki* (21); *mleccha* (58); *sevanī* (2); *taja* (23, 44–45, 48, 58, 78); *tavakṣīra* (7, 10).⁵⁶⁶

No particulars are available about the author. The quotations from Gaṅgādhara's *Gandhasāra* in the *Gandhavāda* establish that the latter treatise is posterior to the former. The references to Bhoja and Siṅghaṇa point to a date later than the first half of the thirteenth century, the period in which Siṅghaṇa, the Yādava king of Devagiri, lived. P.K. Gode⁵⁶⁷ was of the opinion that the type of old Marāṭhī in the commentary of the *Gandhavāda* points to a period of composition between A.D. 1330 and 1550. R.T. Vyas, the editor of the text, expressed as his view that it would be more appropriate if the date were fixed between A.D. 1250 and 1300.⁵⁶⁸ The profuse employment of substances, introduced in the Indian materia medica by the Muslims, proves that the work cannot be assigned to a period earlier than 1300. It may even date from a much later time, since the materia medica differs considerably from that employed by Gaṅgādhara in his *Gandhasāra*.

GAṆḌUŚAPRAKARAṆA.⁵⁶⁹
 GAṆGĀDHARA.⁵⁷⁰
 GAṆGĀDHARACŪRṆANIRMĀNAKRAMA.⁵⁷¹
 GAṆGĀDHARAYOGAVIDHI.⁵⁷²
 GARBHACIKITSĀ.⁵⁷³
 GARBHADHĀRĀNOPĀYAVIDHI.⁵⁷⁴
 GARBHAPRASAVACIKITSĀ.⁵⁷⁵
 GARBHAPUṢṬAPRAYOGA.⁵⁷⁶
 GARBHARAKṢĀVIDHĀNA.⁵⁷⁷
 GARBHASTHITYAUŚADHA.⁵⁷⁸
 GARBHAVEDANĀPRATĪKĀRA.⁵⁷⁹
 GARBHAYĀTANĀCĪKITSĀ.⁵⁸⁰
 GARBHĪNĪCĪKITSĀ.⁵⁸¹
 GARBHĪNĪYĀDICĪKITSĀ.⁵⁸²

GARBHOPANIṢAD.⁵⁸³ This Upaniṣad, attributed to Pippalāda and therefore connected with the tradition of the *Atharvaveda*, is a short post-Vedic work in prose which deals with embryology. Its doctrines partly agree with those of āyurvedic treatises, partly differ from them.⁵⁸⁴

The series of seven elements of the body (*dhātu*) is said to consist of blood (*śoṇita*), muscular tissue (*māṃsa*), fatty tissue (*medas*), tendons (*snāyu*),⁵⁸⁵ bones (*asthi*), bone marrow (*majjā*), and seed (*śukra*).⁵⁸⁶ The six tastes (*rasa*) are those of āyurvedic theory. The skull is regarded as consisting of four flat bones (*kapāla*);⁵⁸⁷ the number of vital spots is 107;⁵⁸⁸ the number of junctures (*sandhi*) is 180;⁵⁸⁹ the human body possesses 109 tendons (*snāyu*),⁵⁹⁰ 700 vessels (*śīrā*),⁵⁹¹ 500 *majjās*,⁵⁹² and 300 bones.⁵⁹³

The weight of the heart is eight, that of the tongue twelve pala. The body contains one *prastha* of bile,⁵⁹⁴ one *ādhaka* of phlegm, one *kuḍava* of semen,⁵⁹⁵ and two *prastha* of fat.

GARUḌAPĀÑCĀKṢARĪKALPA.⁵⁹⁶

The GARUḌAPURĀṆA⁵⁹⁷ contains a number of chapters of medical interest.⁵⁹⁸

Chapter two mentions Garuḍa's desire to become a destroyer of the Nāgas (2.49: nāgadāraṇa). Chapter nineteen is about snakes, their bites, and mantras providing protection. Chapter twenty-seven consists of a long mantra said to destroy the poison of all kinds of venomous snakes. Chapter fifty is concerned with daily regimen. Chapters sixty-three and sixty-four describe bodily marks of men and women (narastrīlakṣaṇa), together with their predictive meaning. Chapter sixty-five deals with the same subject according to Samudra.⁵⁹⁹ Chapter sixty-seven is about svarodayaśāstra, called pavanavijaya in the colophon.⁶⁰⁰ Chapters sixty-eight to eighty are concerned with ratnaparīkṣā, the science dealing with precious and semi-precious stones;⁶⁰¹ their contents agree for the greater part with Buddhabhaṭṭa's *Ratnaparīkṣā*.⁶⁰²

Chapters 146–219 form a medical treatise that is sometimes called *Dhanvantari-saṃhitā*.⁶⁰³ Chapters 146–167 consist of a Nidānasthāna that is closely related to the Nidāna section of the *Aṣṭāṅgahṛdayasaṃhitā* and *Aṣṭāṅgasamgraha*, and may be considered as a third version of the same material.⁶⁰⁴ The chapters on nidāna are presented as being taught by Dhanvantari to Suśruta according to the expositions on the subject by Ātreya and other sages.⁶⁰⁵ The views of Agniveśa and Hārīta are referred to in the chapter on fevers.⁶⁰⁶ Disorders described in the Nidānasthāna of Vāgbhaṭa's works but omitted in the corresponding chapters of the *Garuḍapurāṇa* are svarabheda, mada, mūrchā and saṃnyāsa.⁶⁰⁷

Chapters 168–174 are a continuation of Dhanvantari's lessons to Suśruta.⁶⁰⁸ These chapters are not said to be based on the views of Ātreya, but on a *Yogasāra*.⁶⁰⁹ Chapter 168 deals with basic principles,⁶¹⁰ such as the three doṣas, the dhātus,⁶¹¹ the tastes, vīrya,⁶¹² vipāka, agni, disturbances of the digestive fire⁶¹³ and their treatment. Chapter 169 describes the medicinal properties of articles of food and drugs. Chapters 170 and 171 are concerned with the treatment of various diseases, and chapter 172 with that of women's and children's diseases,⁶¹⁴ rasāyana, and vājīkaraṇa.⁶¹⁵ Chapter 173 is about the properties and actions of groups of drugs. Chapter 174 describes various gṛhṭas and tailas.

Chapters 175 to 196 consist of medical teachings expounded by Hari to Śiva. Chapter 175 is concerned with the treatment of fevers. Chapters 176 to 193 describe treatments for all sorts of diseases. The contents of these chapters differ considerably from those in which Dhanvantari speaks to Suśruta. Many features point to Tantric influence, for example the large number of mantras⁶¹⁶ and the repeatedly described magical procedures.⁶¹⁷ Chapter 184 mentions the killing (māraṇa) of mercury (rasa; 184.18) and the making of artificial silver and gold (184.19). Chapter 194 is about the vaiṣṇava kavaca which keeps off all diseases, and chapter 195 about a mantra that grants everything one desires. Chapter 196 describes the viṣṇudharmavidyā which enabled Indra to overcome all his adversaries.

Chapter 197 deals with the gāruḍa or gāruḍī vidyā, given by Sumitra (in the beginning of the chapter) or Garuḍa (at the end of the chapter) to Kaśyapa, a vidyā which neutralizes the effects of all kinds of poison.⁶¹⁸ Dhanvantari is the speaker again in

chapter 197.

Chapter 210 deals with the medical treatment of horses and elephants.

Chapter 202 forms a short nighaṇṭu, being an enumeration of the names of medicinal plants and other drugs, together with a number of their synonyms.⁶¹⁹

Chapter twenty-two of the Uttarakhaṇḍa or Pretakalpa of the *Garuḍapurāṇa*⁶²⁰ consists of an interesting small treatise on the embryological development of a human being, expounded by Viṣṇu to Garuḍa.⁶²¹

The contents deviate in many respects from what is found on the same subject in āyurvedic treatises.⁶²² Sexual intercourse is not allowed on the first four days of the menstrual cycle.⁶²³ The developmental stages of the embryo are called kalika (first to fourth day),⁶²⁴ budbuda (fifth to ninth day), the stage of the development of māṃsa (tenth to nineteenth day),⁶²⁵ and the stage of the development of ghanamāṃsa (twentieth to twenty-fourth day); from the twenty-fifth day onwards bala and puṣṭi are said to increase (22–23). At the end of the first month of pregnancy the five tattvas are present; the second month is characterized by the development of skin (tvacā) and fatty tissue (medas); bone marrow and bones come into being in the third month, the hair of the head, as well as the ankles (gulpha), in the fourth, ears, nose and the lateral parts of the abdomen (kukṣi) in the fifth, the throat, opening of the skull (randhra) and back (pr-ṣṭha) in the sixth, and the sexual organs (guhya) in the seventh month; all the major and minor parts of the body are present from the eighth month onwards (24–26).⁶²⁶

Bodily constituents, bodily functions, mental processes, etc.,⁶²⁷ derived from the five mahābhūtas, are enumerated as follows: skin, bones, vessels (nāḍyaḥ), body hair and muscles derive from earth, saliva, urine, semen, bone marrow and blood from water, hunger, sleep, thirst, want of energy (ālasya) and beauty (kānti) from fire, running (dhāvana), breathing (śvasana), contraction (ākuñcana), extension (prasāraṇa) and inhibition (nirodha), as well as love (rāga), hate (dveṣa), shame, fear and confusion derive from wind, the production of sounds (ghoṣa), the apertures of the body (chidra), a deep voice(?) (gāmbhīrya), hearing (śravaṇa), and sarvasaṃśraya(?) derive from space (30–36).⁶²⁸

The names of the ten chief nāḍīs are: Idā, Piṅgalā, Suṣumnā, Gāndhārī, Gajajihvā, Pūṣā, Yaśā, Alambuṣā, Kuhū, and Śaṅkhinī (38–39).⁶²⁹ Ten kinds of vāyu are enumerated: prāṇa, apāna, samāna, udāna, vyāna, nāga, kūrma, kṛkara, devadatta, and dhanañjaya (40–41).⁶³⁰ The number of hairs on the body is said to be thirty-five millions,⁶³¹ and that of the hairs on the head three hundred thousand (47–48).⁶³² The quantities of a series of constituents of the body are as follows: one thousand pala of muscular tissue, one hundred pala of blood (rakta), ten pala each of fat and skin, twelve pala of bone marrow, three pala of mahārakta,⁶³³ two kuḍava of semen, one kuḍava of śonita,⁶³⁴ and six kuḍava and a half of phlegm, faeces and urine (48–51).⁶³⁵ A long series of verses (52–66) is devoted to the parallelism between macro- and microcosm; numerous parts of the human body are equated with parts of the macrocosm.⁶³⁶

The *Garuḍapurāṇasāroddhāra* of Naunidhirāma⁶³⁷ mentions a disease called lūtā,⁶³⁸ twelve kinds of bodily excretions (mala) are enumerated.⁶³⁹

Sources of the medical chapters of the *Garuḍapurāṇa* are, apart from the *Aṣṭāṅgahṛdayasaṃhitā*: the *Cakradatta*, Ravigupta's *Siddhasāra* and Vṛnda's *Siddhayoga*.⁶⁴⁰

Some medical treatises quoting the *Garuḍapūrāṇa* (or *Gāruḍa*) are Aghoranātha's commentary on his *Bhīṣaksarvasva* and Vaidyārāja's *Sukhabodha*.

GĀRUḌOPANIṢAD.⁶⁴¹ This short Upaniṣad, belonging to the *Atharvaveda*, deals with the *gāruḍabrahmavidyā*, a mantra effective against the effects of the bite of venomous animals, in particular snakes. This vidyā was given by Brahmā to Nārada, who transmitted it to Brhatsena; the latter passed it down to Indra, Indra to Bharadvāja, Bharadvāja to his pupils.

The names of many divine serpents are mentioned, as well as numerous venomous animals.⁶⁴²

GĀYAMANTRA(?).⁶⁴³
 GHANṬĀKARṆAMANTRAKALPA.⁶⁴⁴
 GHṚTACŪRṆATAILANIRMĀṆAVIDHĀNA.⁶⁴⁵
 GHṚTĀDHIKĀRA.⁶⁴⁶
 GHṚTĀDIYOGA.⁶⁴⁷
 GHṚTANIDĀNA.⁶⁴⁸
 GHṚTAPRAKARAṆA.⁶⁴⁹
 GHṚTARASĀYANACŪRṆAPRAYOGA.⁶⁵⁰
 GHṚTARASĀYANALEHYĀÑJANANIRMĀṆAVIDHI.⁶⁵¹
 GHṚTASARVASVA.⁶⁵²
 GHṚTASIDDHI.⁶⁵³
 GHṚTATĀLĪTISĀRAVṚDDHILAKṢAṆA.⁶⁵⁴
 GHṚTAVAṬAKAGUGGULAVIDHĀNA.⁶⁵⁵
 GHṚTAVIDHĀNA.⁶⁵⁶
 GHṚTAYOGAVIDHI.⁶⁵⁷
 GOPASAMHITĀ.⁶⁵⁸
 GOROCANĀKALPA.⁶⁵⁹
 GOVINDASOMASETU.⁶⁶⁰
 GRAHAṆĪKAVĀṬA.⁶⁶¹
 GRAHAṆĪSŪTIKĀVĀYUPRAMEHACIKITSĀ.⁶⁶²
 GRAHANYATISĀRACIKITSĀ.⁶⁶³
 GUḌAKUṢMĀṆḌAPĀKA.⁶⁶⁴
 GUḌASRĀVAROGA.⁶⁶⁵
 GUḌŪCĪKALPA.⁶⁶⁶
 GUḌŪCYĀDINIGHANṬU.⁶⁶⁷
 GŪḌHĀRTHAPRAKĀṢA.⁶⁶⁸
 GUGGULUNIRŪPAṆA.⁶⁶⁹
 GUGGULUVAṬAKANIRMĀṆACIKITSĀVIDHI.⁶⁷⁰
 GULMACIKITSĀVIDHĀNA.⁶⁷¹
 GUṆACINTĀMANI.⁶⁷²
 GUṆĀDARŚA.⁶⁷³
 GUṆAGAṆA.⁶⁷⁴
 GUṆĀGUṆAGRANṬHA.⁶⁷⁵

GUṆĀGUṆAŚATAŚLOKĪ.⁶⁷⁶
 GUṆAJĀNA.⁶⁷⁷
 GUṆAJĀNANIGHANṬU.⁶⁷⁸
 GUṆAKARMANIRDEŚA.⁶⁷⁹
 GUṆAMĀLĀ.⁶⁸⁰
 GUṆAMAÑJARĪ.⁶⁸¹
 GUṆANIGHANṬU.⁶⁸²
 GUṆAPAṬALA.⁶⁸³
 GUṆAPĀṬHA.⁶⁸⁴
 GUṆAPĀṬHAKĀVYA.⁶⁸⁵
 GUṆARATNĀKARA.⁶⁸⁶
 GUṆARATNAMĀLĀ.⁶⁸⁷
 GUṆAYOGAPRAKĀṢA.⁶⁸⁸
 GURUYĀMALA.⁶⁸⁹
 GUṬIKĀDHIKĀRA.⁶⁹⁰
 GUṬIKĀDHYĀYA.⁶⁹¹
 GUṬIKĀLAVANĀVIDHĀNA.⁶⁹²
 GUṬIKĀPRAKĀRA.⁶⁹³
 GUṬIKĀPRAYOGA.⁶⁹⁴
 HANUMANNIGHANṬU.⁶⁹⁵
 HARAPRADĪPIKĀ.⁶⁹⁶
 HARICAKRA.⁶⁹⁷
 HARIDRĀROGANIDĀNA.⁶⁹⁸
 HARĪNDRAVAIŚEṢIKA.⁶⁹⁹
 HARĪTAKĪBHEDA.⁷⁰⁰
 HARĪTAKĪKALPA.⁷⁰¹
 HARITĀLAKALPA.⁷⁰²
 HĀRĪTAVYUTPATTI.⁷⁰³
 HASTAVRAṆANETRAROGAUSADHANIRMĀNAVICĀRA.⁷⁰⁴
 HETUPRADĪPIKĀ.⁷⁰⁵
 HITOPADEŚAVIDYAKASAMŪHAŚĀSTRA.⁷⁰⁶
 INDRAGRANṬHA RASĀYANAPRAKARAṆA.⁷⁰⁷
 INDRĀVALYAIRANḌATAILACIKITSĀ.⁷⁰⁸
 INDRĀVĀRUNĪKALPA.⁷⁰⁹
 ĪSVARĪKALPA.⁷¹⁰
 JAGATPRAKĀṢA.⁷¹¹
 JALĀDIGUṆAPĀṬHAṬIṢAYA.⁷¹²
 JALAMĀNUṢĀDITANTRA.⁷¹³
 JAMBĪRADĀḌIMABĪJASAMKHYĀ.⁷¹⁴
 JĀNGULĪVIDYĀ.⁷¹⁵
 JARĀCIKITSĀ.⁷¹⁶
 JAYAPĀLAKALPA.⁷¹⁷
 JAYAPARĀJAYARATNA.⁷¹⁸
 JIHVOPAJIHVĀROGACIKITSĀ.⁷¹⁹

JINASĀRASAMGRAHA.⁷²⁰
 JĪRṆAKĀLAPRAMĀṆA.⁷²¹
 JĪRṆAKĀRICŪRṆANIRMĀṆĀVIDHI.⁷²²
 JĪRṆAKRAMANIRṆAYA.⁷²³
 JĪRṆAMAṆJARĪ.⁷²⁴
 JĪRṆASAMKHYĀ.⁷²⁵
 JĪRṆASAMKHYĀVIVARAṆA.⁷²⁶
 JĪVANTĪPĀKA.⁷²⁷

The anonymous⁷²⁸ JĪNĀNBHĀSKARA⁷²⁹ is an extensive work, in the form of a dialogue between Sūrya and his charioteer Aruṇa, on karmavipāka, which means that it regards illness as the result of morally wrong actions in previous lives. The descriptions of the diseases are sometimes very detailed; their cure rests entirely on religious observances. The introductory part of the treatise is about astronomical and astrological subjects.⁷³⁰

The *Jīnānbhāskara* is earlier than the sixteenth century since one of the MSS dates from about A.D. 1500.⁷³¹

A commentary (ṭīkā) on this work was written by Panto Bhaṭṭa, son of Lakṣmaṇa Bhaṭṭa.⁷³²

JĪNĀNĀRṆAVA.⁷³³
 JVARACIKITSĀ.⁷³⁴
 JVARACIKITSITA.⁷³⁵
 JVARĀDĀNANIDĀNA.⁷³⁶
 JVARĀDHIKĀRA.⁷³⁷
 JVARĀDHIKĀRASAMGRAHA.⁷³⁸
 JVARĀDHYĀYA.⁷³⁹
 JVARĀDICIKITSĀ.⁷⁴⁰
 JVARĀDICIKITSĀPRAKĀŚA.⁷⁴¹
 JVARĀGHĀTAMAHIMAN, also called *Jvarapratīkāra*.⁷⁴²
 JVARAHARACŪRṆANIRMĀṆĀVIDHI.⁷⁴³
 JVARAKALPA.⁷⁴⁴
 JVARAKAŚĀYA.⁷⁴⁵
 JVARALAKṢAṆA.⁷⁴⁶
 JVARALAKṢAṆĀDI.⁷⁴⁷
 JVARANIDĀNA.⁷⁴⁸
 JVARAPADDHATĪ.⁷⁴⁹
 JVARAPATHYĀPATHYĀVIDHI.⁷⁵⁰
 JVARAPRATĪKĀRA. See *Jvarāghātamahiman*.
 JVARAROGAKALPA.⁷⁵¹
 JVARAROGAKAPHA.⁷⁵²
 JVARASAMUCCAYA.⁷⁵³
 JVARASAMUCCAYADARPAṆA.⁷⁵⁴
 JVARAŚĀNTI.⁷⁵⁵

JVARAŚĀNTIVIDHI.⁷⁵⁶
 JVARAŚATAŚLOKĪ.⁷⁵⁷
 JVARAUṢADHA.⁷⁵⁸
 JVARĀVALĪ.⁷⁵⁹
 JVARAVIMUKTIDINANIRṆAYA.⁷⁶⁰
 JVARAVIVECANA.⁷⁶¹
 JYOTIṢMATĪKALPA.⁷⁶²
 JYOTSNIKĀ.⁷⁶³
 KĀKAJAṆGHĀKALPA.⁷⁶⁴
 KĀKAPARĪKṢĀ.⁷⁶⁵
 KĀLAJĀNĀNA.⁷⁶⁶
 KĀLAJĀNĀNAVIDHĀNA.⁷⁶⁷
 KĀLIKĀGRANTHA.⁷⁶⁸
 KĀLAMĀRĪKALPA.⁷⁶⁹
 KALĪṆGĀDIGHṚTANIRMĀṆĀVIDHI.⁷⁷⁰
 KALKADRĀVYASAMUCCAYA.⁷⁷¹
 KALLOLINĪ.⁷⁷²
 KALPABHŪṢAṆA.⁷⁷³
 KALPACINTĀMAṆĪ.⁷⁷⁴
 KALPADRUMANIGHAṆṬU.⁷⁷⁵
 KALPAKHAṆḌA.⁷⁷⁶
 KALPALATĀ.⁷⁷⁷
 KALPANĀSĀGARA.⁷⁷⁸
 KALPAPRAKARAṆA.⁷⁷⁹
 KALPARATNA.⁷⁸⁰
 KALPASĀGARA.⁷⁸¹
 KALPASAMGRAHA.⁷⁸²
 KALPASĀRA.⁷⁸³
 KALPASINDHU.⁷⁸⁴
 KALPATARU.⁷⁸⁵
 KALPAUṢADHISEVĀDIPRAKĀRA.⁷⁸⁶
 KALPĀVALĪ.⁷⁸⁷
 KALPAVALLĪ.⁷⁸⁸
 KALYĀNAGHṚTA.⁷⁸⁹
 KALYĀNĀSAMGRAHA.⁷⁹⁰
 KALYĀNATANTRA.⁷⁹¹
 KĀMABHŪTA(?).⁷⁹²
 KĀMADHENU.⁷⁹³
 KĀMARATNĀKARA.⁷⁹⁴
 KĀMILĀVYĀDHIMANTRACIKITSĀ.⁷⁹⁵
 KĀṆKĀYANAVATAKĀ.⁷⁹⁶
 KĀNTĀPATRAPARĪKṢĀVIDHĀNA.⁷⁹⁷
 KAṆṬHAVIDYA.⁷⁹⁸
 KAPARDIKĀKALPA.⁷⁹⁹

KAPHACIKITSĀ.⁸⁰⁰
 KAPHĀTISĀRACIKITSĀ.⁸⁰¹
 KAPILASIDDHĀNTA.⁸⁰²
 KAPINJALATANTRA.⁸⁰³
 KAPITTHĀṢṬAKABHĀGAYOJAKASŪTRA.⁸⁰⁴
 KARAKAKALPA.⁸⁰⁵
 KĀRANĀNUGUṆACIKITSĀKRAMA.⁸⁰⁶
 KARAÑJAKAKALPA.⁸⁰⁷
 KARAÑJAKALPĀDI.⁸⁰⁸
 KARMADĪPAVRṬTI.⁸⁰⁹
 KARMAŚAMBHAVA.⁸¹⁰
 KARMAVĪPĀKA.⁸¹¹
 KARMAVĪPĀKAKĀṆḌA.⁸¹²

KARMAVĪPĀKASAMHITĀ.⁸¹³ This work, in the form of a dialogue between Śiva and Pārvatī, teaches, like the *Vṛddhasūryāraṇasamvāda*, through examples. The text describes the lives of individuals born when the moon is in each of the 108 'feet' or quarter-parts of the nakṣatras, traces their incarnations down to the present one, describes the ripening of their karman in this life, including diseases, and discloses the prāyaścitta or śānti rituals by which they may be cured of their ills. The earliest known MS dates from A.D. 1726.⁸¹⁴

KARMAVĪPĀKASŪCĪ.⁸¹⁵
 KARṆAŚŪLACIKITSĀ.⁸¹⁶
 KARṆIKĀDINIRṆAYA.⁸¹⁷
 KARPŪRĀDICŪRṆARACANĀVIDHĀNA.⁸¹⁸
 KARPŪRAPRAKĀṢĀ.⁸¹⁹
 KĀSANIDĀNA.⁸²⁰
 KĀSĀRASAMUCCAYA.⁸²¹
 KĀSAROGĀDĀNANIDĀNACIKITSĀKRAMA.⁸²²
 KĀSAROGANIDĀNA.⁸²³
 KAṢĀYACIKITSĀ.⁸²⁴
 KAṢĀYACŪRṆAMĀTRĀYOGA.⁸²⁵
 KAṢĀYĀDIPĀKAVIDHI.⁸²⁶
 KAṢĀYĀDIPRAYOGĀḤ.⁸²⁷
 KAṢĀYARASĀYANĀDINIRŪPAṆA.⁸²⁸
 KAṢĀYĀVIDHĀNĀNI.⁸²⁹
 KĀŚĪRĀJASAMHITĀ.⁸³⁰
 KAṢṬĀVALI.⁸³¹
 KASTŪRĪNIRṆAYA.⁸³²
 KASTŪRĪPARĪKṢĀ.⁸³³

KĀŚYAPASAMHITĀ.⁸³⁴ or *Kāśyapīya Garudapañcākṣarīkalpa*:⁸³⁵ a Tantric work on toxicology, related to Nārāyaṇa's *Tantrasārasaṃgraha*.

The treatise, composed in the form of a dialogue between Kāśyapa, called Brahma-putra,⁸³⁶ and his pupil Gautama,⁸³⁷ consists of 853 verses, arranged in thirteen chapters (*adhyaṃya*).

The subjects dealt with in these chapters are: (1) *ṛṣyādimudrābījapañdasamjñā-padādīmantragaṇavidhi*, on mantraśāstra; (2) *dhyāṇavidhi*; (3) (*mantra*) *vinīyogavidhi*, i.e., rules on the application of mantras for various purposes, many of which belong to the realm of *ṣaṭkarman*, such as *śānti*, *puṣṭi*, *rakṣā*, *vaśya*, *ākaraṇa*, *vijaya*, *uccāṭana*, etc.;⁸³⁸ among the diseases to be counteracted mention is made of *jvara*, *rājayakṣman*, *prameha*, *mahodara*, *gulma*, *śūla*, *masūrikā*, *visarpikā*, and *raktasrāva*, as well as of disorders occurring in domestic animals (3.12–16); (4) *nāgopadravādīlakṣaṇavidhi*, on the five types of poison (4.3cd–4ab),⁸³⁹ the eight chiefs of the *nāgas* (*divyoraṇa*; 4.6 and 8–19), and the four classes of ordinary (*prākṛta*) snakes (*darvīkara*, *maṇḍalin*, *rājila* and *vaitaka*; 4.7 and 20–26ab),⁸⁴⁰ their bites, the characteristics of these bites and their symptoms (4.41–62), and finally the seven stages of the effect of poisons (*viṣavega*; 4.63–68); (5) *viṣasamhārādīmantrayantraprayogavidhi*, on counteracting the effects of poisons by means of mantras and yantras; (6) *sarpakṛdīlakṣaṇādividhi*, on the localizations of snake-bites (6.1–7), the collection of drugs (6.8–19), the attraction of serpents into one's presence by magic formulae (*nāgākṛṣṭi*; 6.20–35), their eradication (*uccāṭana*; 6.36–48), and other forms of 'play' (*kṛīḍā*) with serpents; (7) on mantras destroying the effect of snake venom; (8) *darvīkaraviṣacikitsā*, on the bites of *darvīkara* snakes, their symptoms and treatment; (9) *maṇḍaliviṣacikitsā*, the same with respect to *maṇḍalin* snakes; (10) *rājilaviṣacikitsā*, the same with respect to *rājila* snakes; (11) *mūṣikacikitsā*, on the bites of rats and their treatment; (12) *viṣṭatīvidhanānāviṣacikitsā*, on the treatment of the bites of the twenty kinds of spiders (12.1–11ab), the bites of scorpions (12.11cd–17ab), asses, horses, tigers, bears, cats, etc., (12.21cd–42), *sthāvaraviṣa* (12.43–58), *dūṣīviṣa* (12.59–60), *hemaviṣa* (12.61), and *bhallātakaviṣa* (12.62);⁸⁴¹ (13) *abhiṣekayantradhāraṇavidhi*, on consecration and the worship of yantras.

Some parts of the *Kāśyapasamhitā* are very similar to or almost identical with chapters of Nārāyaṇa's *Tantrasārasaṃgraha*.⁸⁴²

The author of the work is unknown. Its date cannot be established with certainty and depends on that of the *Tantrasārasaṃgraha*.

KĀŚYAPASAMHITĀ.⁸⁴³
 KĀŚYAPASAMHITĀ.⁸⁴⁴
 KĀŚYAPASAMHITĀ.⁸⁴⁵
 KĀŚYAPĪYAROGANIDĀNA.⁸⁴⁶
 KAṬUKAROHINĪKALPA.⁸⁴⁷
 KAUTUKACINTĀMAṆI.⁸⁴⁸
 KAUTUKANIRŪPAṆA(?) or *Kautukaprayoga*(?).⁸⁴⁹
 KAUTUKARATNĀVALI.⁸⁵⁰
 KAUTUKASĀRODDHĀRA or *Rājavinoda*.⁸⁵¹
 KAUTUKAYOGA.⁸⁵²
 KĀYĀGNIRAKṢAṆA.⁸⁵³

KEŚARAÑJANA.⁸⁵⁴
 KHALVALAKṢAṆAVICĀRA.⁸⁵⁵
 KHAṆḌĀMALAKAMĀTULUṆGARASĀYANANIRMĀṆAVIDHI.⁸⁵⁶
 KIRĀTA.⁸⁵⁷
 KOLAHASAMHITĀ.⁸⁵⁸
 KRAVYĀDIVYĀKHYĀNA.⁸⁵⁹
 KRIYĀKALĀPAGUṆOTTARA.⁸⁶⁰
 KṚṢṆADHATTŪRAKALPA.⁸⁶¹
 KṚṢṆAGUṆAPĀTHA.⁸⁶²
 KṚṢṆAHARIDRĀKALPA.⁸⁶³
 KṚṢṆĀMALAKAGOPĪCŪRNA.⁸⁶⁴
 KṚṢṆĀPARĀJITĀKALPA.⁸⁶⁵
 KṚTRIMAKOLĀHALA.⁸⁶⁶
 KṚTRIMANIDĀNA.⁸⁶⁷
 KṢĀRAKĀUTUKĪ.⁸⁶⁸
 KṢAYACIKITSĀ.⁸⁶⁹
 KṢAYAMEHALAKṢAṆA.⁸⁷⁰
 KṢAYANIDĀNACIKITSĀ.⁸⁷¹
 KṢAYAROGANIDĀNA.⁸⁷²
 KṢĪṆASVASTHAVĀTAPITTAŚLEṢMALAKṢAṆA.⁸⁷³

KUCIMĀRATANTRA:⁸⁷⁴ a short Tantric treatise on vājīkaraṇa and related subjects.

The work consists of about 165 verses, arranged in eight chapters (paṭala), to which a pariśiṣṭa of six verses has been added.

After a maṅgala and a verse enumerating the subjects of the treatise, chapter one gives recipes which increase the size and firmness of the penis in men and those of the breasts and buttocks in women; some of the formulae also mention an increase of the size of the ears and arms. Chapter two describes the preparation of ointments which promote sexual pleasure in both partners. Chapter three is about vaśīkaraṇa (subjugation, i.e., making women into willing partners in sexual intercourse) of women of various types⁸⁷⁵ and mantras to be muttered in order to achieve this end; powders to be scattered over the head and potions with the same effect are also described. Chapter four is about vājīkaraṇa (aphrodisiacs), chapter five about drāvaṇa (the captivation of women) and stambhana (recipes which delay or prevent ejaculation), chapter six about kanyākaraṇa (tightening of the vagina), chapter seven about vandhyākaraṇa (abortifacients and contraceptives), and chapter eight about lomaśātana (recipes which make the vulvar region glabrous) and prasava (recipes which ensure impregnation). The pariśiṣṭa verses contain a lomanāśana recipe (which removes pubic hair) and two formulae which assure the birth of a son, even in an infertile woman.

Kucumāra is referred to in Vātsyāyana's *Kāmasūtra* (I.1.12) as the expounder of the seventh section, called Aupaniṣadika, of Bābhavya's abbreviated version of the original *Kāmasūtra*.⁸⁷⁶

Noteworthy is the use of the terms indrī for penis (4.13) and setaka⁸⁷⁷ for a particular weight or measure (7.5). A few vernacular words are employed to designate

medicinal plants, for example, kalaujī (7.14) and kāyaphala (7.14).

No particulars are known with regard to the author and the date of the work.

KIṆCALĀVAṬIKĀ.⁸⁷⁸
 KUṆḌALĪPHALASĀRALEHYAVIDHĀNA.⁸⁷⁹
 KŪṢMĀṆḌAGHRTANIRMĀṆAVIDHI.⁸⁸⁰
 KUṢṬHACIKITSĀ.⁸⁸¹
 KUṬAJĀDILEHYAVIDHI.⁸⁸²
 KVĀTHĀDHĪKĀRA.⁸⁸³
 KVĀTHASAMGRAHA.⁸⁸⁴
 LAGHUCIKITSĀ.⁸⁸⁵
 LAGHUCIKITSĀCINTĀMAṆI.⁸⁸⁶
 LAGHUCIKITSĀSĀRA.⁸⁸⁷
 LAGHURATNĀKARA.⁸⁸⁸
 LAGHUSAMGRAHA.⁸⁸⁹
 LAGHUVĀIDYA.⁸⁹⁰
 LAGHUVĀIDYASĀRA.⁸⁹¹
 LAKṢMAṆĀKALPA.⁸⁹²
 LAṆGHANALAKṢAṆA.⁸⁹³
 LĀṆGŪLĪKALPA.⁸⁹⁴
 LEHACINTĀMAṆI.⁸⁹⁵
 LEHYAGHṚTASĀRA.⁸⁹⁶
 LEHYAVIDHĀNA.⁸⁹⁷
 LĪṆGADRĀVAKARAUṢADHANIRMĀṆA.⁸⁹⁸
 MADAMŪRCHĀROGANIDĀNACIKITSĀ.⁸⁹⁹
 MADANANIGHAṆṬU.⁹⁰⁰
 MĀDHAVANIDĀNĀNUSĀRACIKITSĀ.⁹⁰¹
 MADHUKARAKALPA.⁹⁰²
 MADHURACIKITSĀ.⁹⁰³
 MADHUSNEHARASĀYANAKRAMA.⁹⁰⁴
 MADHUSNUHIRASĀYANAVIDHI.⁹⁰⁵
 MAHĀNĀRĀYAṆATAILAVIDHI.⁹⁰⁶
 MAHĀPAṆCĀRKATAILAVIDHĀNA.⁹⁰⁷
 MAHĀRALAPĀDIYOGA.⁹⁰⁸
 MAHĀROGANĀMĀVALI.⁹⁰⁹
 MAHAUṢADHAPRAVAṆĀŚIRVĀDA.⁹¹⁰
 MAHAUṢADHINIRMĀṆOPAYOGAVICĀRA.⁹¹¹
 MAHĀVYĀDHINIVĀRAKAUṢADHANIRMĀṆAVIDHI.⁹¹²
 MAHODARAUṢADHAVIDHI.⁹¹³
 MALAKAṆGANĪVIDHI.⁹¹⁴
 MALAMAVIDHI.⁹¹⁵
 MALAMŪTRAPARĪKṢĀ.⁹¹⁶
 MALAYĀLAVĀIDYA.⁹¹⁷
 MALŪKACANDRIKĀ.⁹¹⁸

MĀMSAMANDŪRAPĀTHĀVAKRAHARĪTAKĪNIRMĀṆAVIDHI.⁹¹⁹
 MĀṆḌALYĀDILEHYAYOGA.⁹²⁰
 MĀṆḌŪKABRAHMAKALPA.⁹²¹
 MĀṆḌŪKABRĀHMĪKALPA.⁹²²
 MĀṆGALAVIDYĀ.⁹²³
 MĀNIPARĪKṢĀDĪNĪ.⁹²⁴
 MĀṆJARĪ.⁹²⁵
 MĀNORAMĀ.⁹²⁶
 MĀNORAMAYOGAGRANTHA.⁹²⁷
 MĀNTRACIKITSĀ.⁹²⁸
 MĀNTRATANTRAUṢADHACIKITSĀ.⁹²⁹
 MĀRJĀRĪKALPA.⁹³⁰
 MARMACIKITSĀ.⁹³¹
 MASŪRIKĀŚĪTALĀDHĪKĀRA.⁹³²
 MAYŪRĀŚĪKHĀKALPA.⁹³³
 MEHABHEDAPRAṆHEDĀDĀNANIDĀNA.⁹³⁴
 MEHACIKITSĀ.⁹³⁵
 MEHANIDĀNA.⁹³⁶
 MEHĀNTAKACŪRṆAVIDHĀNA.⁹³⁷
 MEHAROGANIDĀNA.⁹³⁸
 MEHAUṢADHAPATHYAVICĀRA.⁹³⁹
 MEHAVYĀDHYAUṢADHANIRMĀṆAKRAMA.⁹⁴⁰
 MODAKĀRṆAVA.⁹⁴¹
 MOHINYAUṢADHAVIDHI.⁹⁴²
 MR̥TASAMJĪVANĪ.⁹⁴³
 MR̥TAVATSĀCIKITSĀ.⁹⁴⁴
 MR̥TYUVICĀRA.⁹⁴⁵
 MUKTĀKALPA.⁹⁴⁶
 MŪLIKĀHARAṆAPADDHATĪ.⁹⁴⁷
 MŪLIKĀNUKRAMAṆIKĀ.⁹⁴⁸
 MŪLIKĀPRAKARAṆA.⁹⁴⁹
 MŪLIKĀSIDDHISAMGRAHA.⁹⁵⁰
 MUṆḌĪKALPA.⁹⁵¹
 MUṆḌĪKALPĀDI.⁹⁵²
 MŪṢAKADAṢṬAVIṢAUṢADHA.⁹⁵³
 MUSALĪKALPA.⁹⁵⁴
 MUṢṬISAMGRAHA.⁹⁵⁵
 MŪTRĀDIPARĪKṢĀ.⁹⁵⁶
 MŪTRAKṚCCHRAKITSĀ.⁹⁵⁷
 MŪTRAKṚCCHRAKITSĀDI.⁹⁵⁸
 MŪTRAKṚCCHRANIDĀNA.⁹⁵⁹
 MŪTRAKṚCCHRAUṢADHANIRMĀṆAKRAMA.⁹⁶⁰
 MŪTRAPARĪKṢĀ.⁹⁶¹
 MŪTRATAILAPARĪKṢĀ.⁹⁶²

NĀGĀRJUNAGUṬIKĀVIDHĀNA.⁹⁶³
 NAKṢATRAṆIRNAYA.⁹⁶⁴
 NĀMAGUṆASĀRASAMGRAHA.⁹⁶⁵
 NĀMARATNĀKARANIGHANṬU.⁹⁶⁶
 NĀMĀVALĪ, also called *Oṣadhināmamālā* and *Vaidyanāmamālā*.⁹⁶⁷
 NĀNĀGHR̥TALEHYATAILANIRMĀṆAVIDHI.⁹⁶⁸
 NĀNĀKAṢĀYAKALKANIRMĀṆAKRAMA.⁹⁶⁹
 NĀNĀRASAVIVEKA.⁹⁷⁰
 NĀNĀROGACIKITSĀ.⁹⁷¹
 NĀNĀROGACIKITSĀKRAMA.⁹⁷²
 NĀNĀROGAMANTRAUṢADHACIKITSĀKRAMA.⁹⁷³
 NĀNĀROGAŚĀNTI.⁹⁷⁴
 NĀNĀROGAUṢADHANIRMĀṆATATPRAYOGAVIVARAṆA.⁹⁷⁵
 NĀNĀROGAUṢADHĀNUPĀNAPATHYAVICĀRA.⁹⁷⁶
 NĀNĀŚĀSTRA.⁹⁷⁷
 NĀNĀTAILANIRMĀṆATADUPAYOGAVIDHI.⁹⁷⁸
 NĀNĀTAILANIRMĀṆAVIDHĀNA.⁹⁷⁹
 NĀNAUṢADHANIRMĀṆAVIDHĀNA.⁹⁸⁰
 NĀNAUṢADHATADUPAYOGAVIDHI.⁹⁸¹
 NĀNAUṢADHAVIDHI.⁹⁸²
 NĀNAUṢADHOPAYOGAVIDHĀNA.⁹⁸³
 NĀNĀVIDHAUṢADHA.⁹⁸⁴
 NĀNĀVIDHAUṢADHAKALPA.⁹⁸⁵
 NĀNĀVIDHAVIDYA.⁹⁸⁶
 NĀNĀVYĀDHICIKITSĀ.⁹⁸⁷
 NĀNĀVYĀDHICIKITSĀVIDHĀNA.⁹⁸⁸
 NĀNĀVYĀDHIMANTRAUṢADHACIKITSĀVIDHI.⁹⁸⁹
 NĀNĀYURVEDA.⁹⁹⁰
 NĀRĀYAṆAKALKAVIDHĀNA.⁹⁹¹
 NĀRIKELĀṆJANA.⁹⁹²
 NASYADHŪPAVICĀRA.⁹⁹³
 NASYAVIDHI.⁹⁹⁴
 NAVAKAPARĪKṢĀ.⁹⁹⁵
 NAVAPATTRACIKITSĀ.⁹⁹⁶
 NAYABODHIKĀ.⁹⁹⁷
 NAYANASUKHA.⁹⁹⁸
 NETRACANDRODAYA.⁹⁹⁹
 NETRĀMAYAVICĀRA.¹⁰⁰⁰
 NETRĀṆJANAVIDHI.¹⁰⁰¹
 NETRAROGACIKITSĀ.¹⁰⁰²
 NETRAROGANIDĀNA.¹⁰⁰³
 NETRATAILANIRMĀṆAVICĀRA.¹⁰⁰⁴
 NETRAVAIDYA.¹⁰⁰⁵
 NIDĀNA.¹⁰⁰⁶

NIDĀNACIKITSĀ. ¹⁰⁰⁷
 NIDĀNAGRANTHA. ¹⁰⁰⁸
 NIDĀNAMAÑJARĪ. ¹⁰⁰⁹
 NIDĀNASAMGRAHA. ¹⁰¹⁰
 NIDĀNASĀRA. ¹⁰¹¹
 NIDĀNASĀRASAMGRAHA. ¹⁰¹²
 NIDĀNASŪTRA. ¹⁰¹³
 NIDĀNATĪKĀ. ¹⁰¹⁴
 NIDĀNAVIŚAYA. ¹⁰¹⁵
 NIDĀNAVṚTTAMĀNIKYAMĀLĀ. ¹⁰¹⁶
 NIDĀNAVYĀKHYĀ. ¹⁰¹⁷
 NIDĀNAYOGARATNĀVALĪ. ¹⁰¹⁸
 NIGHAṆṬU. ¹⁰¹⁹
 NIGHAṆṬUDARPAṆA. ¹⁰²⁰
 NIGHAṆṬUMĀLĀ. ¹⁰²¹
 NIGHAṆṬUNĀMĀVALĪ or *-āvali*. ¹⁰²²
 NIGHAṆṬUSAMGRAHA. ¹⁰²³
 NIGHAṆṬUSĀRA. ¹⁰²⁴
 NIGHAṆṬUŚĀSTRA. ¹⁰²⁵
 NIGHAṆṬUVAIDYAKA. ¹⁰²⁶
 NIGHAṆṬUVAIDYAKAŚĀSTRA. ¹⁰²⁷
 NĪLAKAṆṬHAVIDYAKA. ¹⁰²⁸
 NIMBAKALPA. ¹⁰²⁹
 NIRGUṆḌĪKALPA. ¹⁰³⁰
 NIṢKAPRAMĀṆANIRNAYA. ¹⁰³¹
 NṚSIMHASAMHITĀ. ¹⁰³²
 NŪTANAKALPA. ¹⁰³³
 NŪTANAVIDHI. ¹⁰³⁴
 OṢADHIKALPA. ¹⁰³⁵
 OṢADHIKOŚA. ¹⁰³⁶
 OṢADHINĀMAMĀLĀ. ¹⁰³⁷
 OṢADHINĀMĀNI. ¹⁰³⁸
 OṢADHINIGHAṆṬU. ¹⁰³⁹
 PADĀRTHABODHA. ¹⁰⁴⁰
 PADĀRTHAGUṆACINTĀMAṆĪ. ¹⁰⁴¹
 PADĀRTHAŚUDDHI. ¹⁰⁴²
 PADĀRTHAVIJÑĀNA. ¹⁰⁴³
 PADYĀMṚTAMĀLĀ. ¹⁰⁴⁴
 PAITTYABHEDĀḤ. ¹⁰⁴⁵
 PAITTYAROGĀDĀNANIDĀNA. ¹⁰⁴⁶
 PALĀŚAKALPA. ¹⁰⁴⁷
 PĀMĀCİKITSĀ. ¹⁰⁴⁸
 PĀNAVIDHI. ¹⁰⁴⁹

PAÑCAKARMAVICĀRA. ¹⁰⁵⁰
 PAÑCAKARMAVIDHI. ¹⁰⁵¹
 PAÑCAMAVILĀSA. ¹⁰⁵²
 PAÑCĀṆGANIMBAKALPA. ¹⁰⁵³
 PAÑCANIDĀNATIPPANĪ. ¹⁰⁵⁴
 PAÑCĀRKATAILANIRMĀṆAVIDHI. ¹⁰⁵⁵
 PAÑCĀŚATAYOGĀḤ. ¹⁰⁵⁶
 PAÑCĀŚTAKARMAṆOR VICĀRAḤ. ¹⁰⁵⁷
 PAÑCAVIṢŚAKATĪKĀ. ¹⁰⁵⁸
 PĀṆDUROGACIKITSĀ. ¹⁰⁵⁹
 PĀṆDUROGĀDĀNACIKITSĀ. ¹⁰⁶⁰
 PĀṆDUROGANIDĀNA. ¹⁰⁶¹
 PARĀKRṬA-(PRĀKRṬA-?)VAIDYĀDIGUṬIKĀ. ¹⁰⁶²
 PARAṆGYĀDICŪRṆAVIDHI. ¹⁰⁶³
 PARIBHĀṢĀ. ¹⁰⁶⁴
 PARICAYAMUKTĀVALĪ. ¹⁰⁶⁵
 PĀRIJĀTANIBANDHA. ¹⁰⁶⁶
 PĀRIJĀTASUNṬHĪ. ¹⁰⁶⁷
 PARĪKṢĀSĀRA. ¹⁰⁶⁸
 PARĪKṢĀVIDHĀNA. ¹⁰⁶⁹
 PARIMALAPĀRIJĀTA. ¹⁰⁷⁰
 PARYĀYAMAÑJARĪ. ¹⁰⁷¹
 PARYĀYAMUKTĀVALĪ or *Muktāvali*. ¹⁰⁷²
 PARYĀYAPĀṬHA. ¹⁰⁷³
 PARYĀYARATNAMĀLĀ. ¹⁰⁷⁴
 PARYĀYĀRṆAVA. ¹⁰⁷⁵
 PĀṬADĀ. ¹⁰⁷⁶
 PĀTANĪJALATANTRA. ¹⁰⁷⁷
 PĀTHĀKALPA. ¹⁰⁷⁸
 PĀTHĀTAKRAHARĪTAKĪYOGA. ¹⁰⁷⁹
 PĀTHAUṢADHI. ¹⁰⁸⁰
 PATHYĀPATHYA. ¹⁰⁸¹
 PATHYĀPATHYA, DHANVANTARĪYA-. ¹⁰⁸²
 PATHYĀPATHYADEŚAVICĀRA. ¹⁰⁸³
 PATHYĀPATHYĀDHIKĀRA. ¹⁰⁸⁴
 PATHYĀPATHYĀDINIRNAYA. ¹⁰⁸⁵
 PATHYĀPATHYADRAVYAGUṆAVARNANA. ¹⁰⁸⁶
 PATHYĀPATHYANIGHAṆṬU. ¹⁰⁸⁷
 PATHYĀPATHYANIGHAṆṬU. ¹⁰⁸⁸
 PATHYĀPATHYANIRNAYA. ¹⁰⁸⁹
 PATHYĀPATHYASAMGRAHA. ¹⁰⁹⁰
 PATHYĀPATHYASARVAROGĀDHIKĀRA. ¹⁰⁹¹
 PATHYĀPATHYAVARGA. ¹⁰⁹²

PATHYĀPATHYAVICĀRA. ¹⁰⁹³
 PATHYĀPATHYAVIDHĀNA. ¹⁰⁹⁴
 PATHYĀPATHYAVIDHI. ¹⁰⁹⁵

PATHYĀPATHYAVINIŚCAYA. ¹⁰⁹⁶ a compilation on beneficial (pathya) and harmful (apathya) therapeutic measures, diet, etc., in various diseases.

After a series of introductory verses and an exposition on the purpose of the book and its subjects, including general observations on the nature and importance of pathya and apathya, the author proceeds to describe beneficial and harmful therapeutic measures in a long series of diseases, arranged in the same order as in the *Cakradatta*. ¹⁰⁹⁷ The elements of therapy discussed are not restricted to articles of diet and drugs, but also comprise pañcakarman, bloodletting, cauterization, surgical interventions, etc.

Sources are not indicated by the author, but the main source may have been the *Cakradatta*. ¹⁰⁹⁸ Some verses have been borrowed from Caraka. ¹⁰⁹⁹

The *Pathyāpathyavinīścaya* is said to be quoted by Śivadāśasena; it was extensively used by the author of the *Yogarātnākara*, a work that even quotes the introductory verse with the title of the treatise. ¹¹⁰⁰

Some remarkable items of the materia medica are ahipheṇa, kumārī, methī, payah-peṭī, ¹¹⁰¹ vajravallī, ¹¹⁰² and vijayā. ¹¹⁰³

The presence of a number of vegetables and fruits which are prevalent in Bengal, such as hīlamocikā, kañcaṭa, nāḍica, śālīñca, and sunīṣaṇṇaka, indicates that the treatise was written in that region. Most of the MSS do not mention the name of the author, but some ascribe it to Dakṣarūpa, Mādhavakara, or Śivadāśa. ¹¹⁰⁴

The materia medica points to a period later than the twelfth century. The treatise antedates the fifteenth century if Śivadāśasena was indeed acquainted with it.

PATHYĀPATHYAVIVEKA. ¹¹⁰⁵
 PATHYAVARGA. ¹¹⁰⁶
 PATHYAVICĀRA. ¹¹⁰⁷
 PATHYAVIDHĀNA. ¹¹⁰⁸
 PAṬṬIPRAKĀŚA. ¹¹⁰⁹
 PĀUṢṬIKAUṢADHAGUṬIKĀ. ¹¹¹⁰
 PĪNASALAKṢAṆACIKITSĀVIDHI. ¹¹¹¹
 PIṆḌASIDDHI. ¹¹¹²

PIṆḌOPANIṢAD. ¹¹¹³ This Upaniṣad describes how a new human being arises thanks to the offering of piṇḍas to a deceased ancestor. The first piṇḍa results in the formation of the kalās of the new body, the second in the formation of muscles (māṃsa), skin and blood; the third piṇḍa makes the mati arise, the fourth causes the formation of bones and bone marrow, the fifth the formation of hands, fingers, head and mouth, the sixth the formation of heart, throat and palate; the seventh piṇḍa endows the new being with āyus; the eighth gives it a voice, the ninth endows it with all the senses, and the tenth with the bhāvas.

PIṆḌOTPATTISAMGRAHA. ¹¹¹⁴
 PIPPALYĀDIGHRṬA. ¹¹¹⁵
 PIPPALYĀDIRASĀYANA. ¹¹¹⁶
 PIŚĀCAVIJAYA. ¹¹¹⁷
 PITTAJVARAKAŚĀYAVIDHĀNA. ¹¹¹⁸
 PITTĀTISĀRACIKITSĀ. ¹¹¹⁹
 PITTAVĀYUVINĀŚAKACŪRṆA. ¹¹²⁰
 PRABHĀVATĪGUṬIKĀKALPA. ¹¹²¹
 PRABHĀVATĪKALPA. ¹¹²²
 PRABHĀVATĪMĀTRĀVIDHI. ¹¹²³
 PRABHĀVATĪVAṬAKAVIDHI. ¹¹²⁴
 PRABHĀVATĪVARTIVIṢAMAŚĪTAILAVIDHĀNA. ¹¹²⁵
 PRADARAROGACIKITSĀVIDHI. ¹¹²⁶
 PRAKĪRṆAKAPADYĀDI. ¹¹²⁷
 PRAKĪRṆAVIDYASAMGRAHA. ¹¹²⁸
 PRĀKRṬACIKITSĀRṆAVA. ¹¹²⁹
 PRĀKRṬILAKṢAṆA. ¹¹³⁰
 PRĀKRṬIVIVECANADĪPA. ¹¹³¹
 PRAMEHACIKITSĀ. ¹¹³²
 PRAMEHĀDHĪKĀRA. ¹¹³³
 PRAMEHĀDICIKITSĀ. ¹¹³⁴
 PRAMEHANIDĀNA. ¹¹³⁵
 Prāṇasukha. ¹¹³⁶
 PRASAṆGARATNĀVALI. ¹¹³⁷
 PRASAVAVEDANĀPARIHĀRAVIDHI. ¹¹³⁸
 PRASAVAVIKṚTISĀNTI. ¹¹³⁹
 PRASŪTICIKITSĀ. ¹¹⁴⁰
 PRASŪTIKĀROGANIDĀNA. ¹¹⁴¹
 PRATIMARŚA. ¹¹⁴²
 PRAYOGACINTĀMAṆI. ¹¹⁴³
 PRAYOGAKAṆṬHĀBHARAṆA. ¹¹⁴⁴
 PRAYOGAMĀLĀ. ¹¹⁴⁵
 PRAYOGĀMṚTA. ¹¹⁴⁶
 PRAYOGASĀRA. ¹¹⁴⁷
 PRAYOGAVIJAYASĀRĀVALI. ¹¹⁴⁸
 PURĀTANAYOGASAMGRAHA. ¹¹⁴⁹
 PURUṢĀRTHAPRABODHA. ¹¹⁵⁰
 PUṢPADRĀVAKAVIDHĀNA. ¹¹⁵¹
 PŪTANĀVIDHĀNA. ¹¹⁵²
 PUṬAPRAKARAṆA. ¹¹⁵³
 RAHASYAUSADHA. ¹¹⁵⁴
 RĀHUDVĀDAŚABHĀVAPHALA. ¹¹⁵⁵
 RĀJAMĀRTAṆḌA. ¹¹⁵⁶
 RĀJAMṚGĀṆKA. ¹¹⁵⁷

RĀJAVINODA. See *Kautukasāroddhāra*.
 RĀJAYAKṢMANIDĀNA. ¹¹⁵⁸
 RAKTAGUṆJĀKALPA. ¹¹⁵⁹
 RAKTAPITTACIKITSĀ. ¹¹⁶⁰
 RAKTAPITTĀDINIDĀNACIKITSĀ. ¹¹⁶¹
 RAKTAPITTANIDĀNA. ¹¹⁶²
 RAṆAVĪRAPRAKĀŚA. ¹¹⁶³
 RASABHEDĪYAPRASTĀRAPRADARŚANA. ¹¹⁶⁴
 RASAKRAVYĀDINĀMAKAUṢADHAVIDHĀNA. ¹¹⁶⁵
 RASANĀNIGRAHA. ¹¹⁶⁶
 RATNĀKARANIGHANṬA. ¹¹⁶⁷
 RATNĀKARAUṢADHAYOGAGRANTHA. ¹¹⁶⁸
 RATNASĀGARA. ¹¹⁶⁹
 ROGACIKITSĀ. ¹¹⁷⁰
 ROGACIKITSĀNIDĀNA. ¹¹⁷¹
 ROGĀDĀNAVIDHĀNA. ¹¹⁷²
 ROGAHARADĀNAVACANĀNĪ. ¹¹⁷³
 ROGALAKṢAṆA. ¹¹⁷⁴
 ROGALAKṢAṆACIKITSĀ. ¹¹⁷⁵
 ROGALAKṢAṆANIDĀNA. ¹¹⁷⁶
 ROGAMŪRTINIRNAYA. ¹¹⁷⁷
 ROGANAKṢATRAVĀRALAKṢAṆA. ¹¹⁷⁸
 ROGANĀMASAMGRAHA. ¹¹⁷⁹
 ROGANIDĀNA. ¹¹⁸⁰
 ROGANIRNAYA. ¹¹⁸¹
 ROGANIŚCAYA. ¹¹⁸²
 ROGĀNTAKASĀRA. ¹¹⁸³
 ROGAPARĪKṢĀ. ¹¹⁸⁴
 ROGAPARĪKṢAṆA. ¹¹⁸⁵
 ROGAPRADĪPA. ¹¹⁸⁶
 ROGĀRAMBHA. ¹¹⁸⁷
 ROGĀRAMBHAPHALA. ¹¹⁸⁸
 ROGAŚAKUNAPRĀCCHĀ. ¹¹⁸⁹
 ROGASAMKHYĀ. ¹¹⁹⁰
 ROGASAMKHYĀNIDĀNA. ¹¹⁹¹
 ROGAŚĀNTI. ¹¹⁹²
 ROGAŚUBHĀŚUBHANAKṢATRAVICĀRA. ¹¹⁹³
 ROGATANNIDĀNAUṢADHĀNUPĀNASĀRA. ¹¹⁹⁴
 ROGAUṢADHACIKITSĀ. ¹¹⁹⁵
 ROGAUṢADHACIKITSĀVIDHĀNA. ¹¹⁹⁶
 ROGAUṢADHADRAVYANĀMASAMUCCAYA. ¹¹⁹⁷
 ROGAUṢADHAVICĀRA. ¹¹⁹⁸
 ROGĀVALĪ. ¹¹⁹⁹
 ROGĪPARĪKṢĀ. ¹²⁰⁰

ROGOTPATTINAKṢATRA NIRŪPAṆA. ¹²⁰¹
 ROGOTPATTIPĀCICIKITSĀVIŚAYA. ¹²⁰²
 RŚYAŚRṆGASAMHITĀ. ¹²⁰³
 RŚYAŚRṆGATANTRA. ¹²⁰⁴
 RTUCARYĀ. ¹²⁰⁵
 RTUGUṆA. ¹²⁰⁶
 RTULAKṢAṆA. ¹²⁰⁷
 RTUNĪTĪ. ¹²⁰⁸
 RTUSAMHĀRA. ¹²⁰⁹
 RUCIVADHŪGALARATNAMĀLĀ. ¹²¹⁰
 RUDANTĪKALPA. ¹²¹¹
 RUDANTYĀDIKALPA. ¹²¹²
 RUDRADATTA. ¹²¹³ A *Rudradatta* is referred to in the *Amṛtasāgara*.
 RUDRĀKṢAKALPA. ¹²¹⁴
 RUKPRATIKRIYĀ. ¹²¹⁵
 ŚABDARATNAPRADĪPA. ¹²¹⁶
 SĀDHYĀSĀDHYAMAHĀROGALAKṢAṆACIKITSĀ. ¹²¹⁷
 SĀDHYĀSĀDHYAPARĪKṢĀ. ¹²¹⁸
 SĀDHYĀSĀDHYASVARŪPA. ¹²¹⁹
 ŚADRASARATNAMĀLĀ. ¹²²⁰
 SADVAIDYAJĪVANA. ¹²²¹
 SADVAIDYARATNĀKARA. ¹²²²
 SAHADEVĪKALPA. ¹²²³

SAHASRAYOGA. ¹²²⁴ This anonymous treatise, very popular among the vaidyas of Kerala, consists of a collection of recipes. ¹²²⁵

The majority of the recipes are in Sanskrit, but about one hundred and twenty of them (in ed. c) are in a mixture of Sanskrit and Malayāḷam, called *maṇipravāḷam*. ¹²²⁶

The *Sahasrayoga* employs a Malayāḷam technical term for one of the stages of what is called *sneha*pāka; this term, *cēḷipāka*, is explained by N.S. Mooss. ¹²²⁷

The formulae are for the larger part of an āyurvedic type, but *rasayogas* are found too. ¹²²⁸

The order of the diseases against which the formulations are effective is partly in agreement with the arrangement of the *Mādhavanidāna* in ed. b. ¹²²⁹ The arrangement of the diseases is largely in conformity with the *Mādhavanidāna* from *jvara* up to *mūtrakṛcchra*. Deviations in this section are: additional chapters on *jvarāṭisāra*, *viṣūci* and *udāvarta*, a chapter on *hṛdroga* between those on *rājayakṣman* and *śvāsa-kāsa*, a chapter on *sthaulya* between those on *śvāsa-kāsa* and *hikkā*, a chapter on *kuṣṭha* between those on *vātarakta* and *sūla*. The chapters after that on *mūtrakṛcchra* deal with: *vṛddhi*, *asṛgdara*, *garbhīṇiroga*, *sūtikāroga*, *malaśodhana*, *vamana*, *ārtavaśodhana*, *yonisūla*, *śopha*, *kāmilā*, *masūrī*, *viṣa*, *vidradhi*, *mahodara*, and *paraṅki*. ¹²³⁰

The second part of edition b consists of prescriptions arranged according to the type of pharmaceutical preparation: *guṭikā* (77 items), *vaṭakādi* (22 items), *cūrṇa* (108 items), *bhasmakṣāra* (19 items), *lehya* (50 items), *aṛiṣṭa* (25 items), *āśava* (20 items),

taila (96 items), and ghr̥ta (135 items).

After a few chapters with prescriptions to be used in ūrdhvāṅgaroga and śīroroga, and one on the purification (śuddhi) of various medicinal substances, edition b ends with verses on dhārākālpa, which are mostly close to those of Kālidāsa's *Dhārākālpa*, but occasionally borrowed from the *Aṣṭāṅghṛdayasaṃhitā*,¹²³¹ and a section on nidāna in Malayālam prose.

Edition c differs from ed. b in arranging all the recipes according to the type of pharmaceutical preparation. It consists of a kaṣāyaprakaraṇa (72 recipes),¹²³² ghr̥taprakaraṇa (59 recipes), tailaprakaraṇa (74 recipes), cūrṇaprakaraṇa (92 recipes), to which a section with bhasmakṣārādiyogas is added (14 recipes), ariṣṭaprakaraṇa (15 recipes), āsavaprakaraṇa (10 recipes), lehyaprakaraṇa (46 recipes), vaṭīprakaraṇa (16 recipes), guṭikāprakaraṇa (70 recipes), pariśiṣṭaprakaraṇa (111 recipes), and a second tailaprakaraṇa (44 recipes).¹²³³ The verses on dhārākālpa are absent from this edition.

Noteworthy diseases mentioned in ed. c are: asthisrāva (45), kapālārśas (98), nimnonnatajvara (= viṣamajvara), phiraṅgaroga (287), somaroga (39, 249).

Noteworthy items of the materia medica of ed. c are:¹²³⁴ aghorī (149),¹²³⁵ agni-jihvā (107),¹²³⁶ agragrāhī (144, 225, 201, 255),¹²³⁷ agrapūṣpī (30), aijhaḍā (136),¹²³⁸ ākulī (54, 129),¹²³⁹ ālūpaka (90),¹²⁴⁰ āmrāgandhā (312),¹²⁴¹ ānanda (238),¹²⁴² añjhu-dā (100),¹²⁴³ aranyatulasī (10),¹²⁴⁴ arkarāga (254),¹²⁴⁵ āśālī (148),¹²⁴⁶ āvīra (12), bhadrikā (68, 71),¹²⁴⁷ bhūmitāla (32),¹²⁴⁸ bhūpīlu (66), bhūśarkarā (207),¹²⁴⁹ bhūtāla (149),¹²⁵⁰ daṣapūṣpa (296),¹²⁵¹ devadhūpa (85),¹²⁵² dhūpapattra (141),¹²⁵³ dhūpikā-sāra (141),¹²⁵⁴ dīneśavallī (100),¹²⁵⁵ drāmaḍī (129, 142),¹²⁵⁶ gāndhārī (207),¹²⁵⁷ girimallikā (63),¹²⁵⁸ girimardīnī (105),¹²⁵⁹ harikrāntī (4),¹²⁶⁰ hariparnikā (107),¹²⁶¹ haṭha (91, 93),¹²⁶² hirūverikā (27),¹²⁶³ ikṣvā (107), indravallī (91, 107, 149),¹²⁶⁴ jalakandaka (60),¹²⁶⁵ jambāla (236, 240),¹²⁶⁶ jambīrī (78), jvālāmukhī (237),¹²⁶⁷ kaṇḍiveṇṇa (140, 147), kanmadavedhin (140),¹²⁶⁸ kannāra (140, 146, 245, 261), kapi (149),¹²⁶⁹ kapota (20),¹²⁷⁰ kāralatikā (107), karuppu (140),¹²⁷¹ kāsaharī (11),¹²⁷² kāviyu (140),¹²⁷³ kerī (= nārikela; 69, 78), khapura (85),¹²⁷⁴ kṛṣṇabīja (207), kuhālī (45, 106), kukūla (107),¹²⁷⁵ kūvā (136),¹²⁷⁶ mahātālakanda (129), mahītāla (129),¹²⁷⁷ maṇḍaka (78),¹²⁷⁸ mehāri (54),¹²⁷⁹ modaka (144),¹²⁸⁰ modakatvac (45, 46),¹²⁸¹ mṛdukuñcikā (68), nābhi (146, 230),¹²⁸² navasāra (105), nīṅgaṇa (296, 308),¹²⁸³ pārāṅkī (147),¹²⁸⁴ pārāntī ((54),¹²⁸⁵ parpaṇa (55), paṣugandhā (130, 132),¹²⁸⁶ paṣupāśī (144, 150),¹²⁸⁷ pūtavṛkṣā (147),¹²⁸⁸ rajatāri (107),¹²⁸⁹ rakṣatikā (107), śakralatā (22, 55),¹²⁹⁰ śakravallārī (86),¹²⁹¹ sannināyaka (140, 147), sphotyābhujāṅgama (72), śrīkaṇṭha (84, 93, 139),¹²⁹² suvarṇatṛṇa (148), svarṇāsya (118),¹²⁹³ svastika (44),¹²⁹⁴ takkola (58, 93, 94, 99, 103, 123, 161),¹²⁹⁵ tekārāja (82, 91, 116, 227),¹²⁹⁶ trikaṇā (55),¹²⁹⁷ trikānta (88),¹²⁹⁸ tripādī (11, 304),¹²⁹⁹ triyava (205),¹³⁰⁰ uttamakanyakā (4),¹³⁰¹ vaikunṭha (30, 98),¹³⁰² vairī (149),¹³⁰³ varāla (141),¹³⁰⁴ vārdhipattraka (52),¹³⁰⁵ varṇavatī (107),¹³⁰⁶ varūṇa (51), vibudhataru (130),¹³⁰⁷ viṣṇukrāntī (10, 30),¹³⁰⁸ and yakṣākṣī (22).¹³⁰⁹

Recipes found in the *Sahasrayoga* which have been studied are:¹³¹⁰ daśamūlakatutrayakaṣāya (11),¹³¹¹ veṭṭumāranguṭikā (253).¹³¹²

A not inconsiderable number of the formulae of the *Sahasrayoga* are also found, either in the same form or modified, in other medical works.¹³¹³

A *Sahasrayoga*, *Sahasrayogī*, and *Sahasrayogavyākhyā* are quoted in Anantakumā-

ra's *Yogaratanasamuccaya*. The *Sahasrayoga* is one of the sources of the *Bheṣajasaṃhitā*.

The author and date of the *Sahasrayoga* are unknown.

SAKALAROGACIKITSĀGRANTHA.¹³¹⁴
SAKALAROGAGANANĀ.¹³¹⁵
ŚĀKALASAMHITĀ.¹³¹⁶
ŚAKUNAPARIKṢĀDI.¹³¹⁷
ŚĀLĀKYATANTRA.¹³¹⁸
ŚĀLMĀLĪKĀLPĀ.¹³¹⁹
ŚĀLYATANTRA.¹³²⁰
SAMASAMBHOJANAVIDHI.¹³²¹
SAMASTADRAVYASŪDDHYAIKAKRAMANIRŪPA.¹³²²
SAMDEHABHAṆJANĪ.¹³²³
SAMGRAHANĪROGACIKITSĀ.¹³²⁴
SAMGRAHARATNAMĀLĀ.¹³²⁵
SAMGRAHATARAṆGIṆĪ.¹³²⁶
SAMJÑĀSAMUCCAYA.¹³²⁷
SAMNIPĀTACANDRIKĀ.¹³²⁸
SAMNIPĀTACIKITSĀ.¹³²⁹
SAMNIPĀTĀDIROGANIDĀNA.¹³³⁰
SAMNIPĀTĀJVARANIDĀNA.¹³³¹
SAMNIPĀTAKALIKĀ.¹³³²
SAMNIPĀTALAKṢAṆA.¹³³³
SAMNIPĀTALAKṢAṆACIKITSĀ.¹³³⁴
SAMNIPĀTALAKṢAṆĀNĪ.¹³³⁵
SAMNIPĀTANĀDĪLAKṢAṆA.¹³³⁶
SAMNIPĀTANIDĀNA.¹³³⁷
SAMNIPĀTANIDĀNA and -CIKITSĀ.¹³³⁸
SAMNIPĀTAPĀDACANDRIKĀ.¹³³⁹
SAMNIPĀTAPATHYĀPATHYĀDI.¹³⁴⁰
SAMNIPĀTAPRAKARAṆA.¹³⁴¹
SAMNIPĀTĀRŪPA.¹³⁴²
ŚANḌHĀDHIKĀRA.¹³⁴³
ŚANḌHASPHUṬĀKA.¹³⁴⁴
ŚAṆGASAMUCCAYA.¹³⁴⁵
SANTĀNASROTA.¹³⁴⁶
SĀRACANDRIKĀ.¹³⁴⁷
SĀRADĪPIKĀ.¹³⁴⁸
SĀRAKAUMUDĪ.¹³⁴⁹ See *Cikitsāsārakamudī*.
SĀRANĀTAILASĀDHANA.¹³⁵⁰
SĀRĀṆGALAVANANIRMANĀVIDHI.¹³⁵¹
SĀRANIGHANṬU.¹³⁵²
SĀRASAMGRAHA.¹³⁵³

SĀRASVATĀBHIDHĀNA. ¹³⁵⁴
 SĀRASVATAGHṚTĀDIYOGA. ¹³⁵⁵
 SĀRASVATĪCŪRNAVIDHĀNA. ¹³⁵⁶
 SĀRATILAKA. ¹³⁵⁷
 SĀRĀVALĪ or *Sārāvali*. ¹³⁵⁸
 ŚĀRĪRA. ¹³⁵⁹
 ŚĀRĪRAKĀNUṢṬHEYASĀMĀNYAVICĀRA. ¹³⁶⁰
 ŚĀRĪRANIBANDHASAMGRAHA. ¹³⁶¹
 ŚĀRĪRASAMGRAHA. ¹³⁶²
 ŚĀRĪRAVAIDYA. ¹³⁶³
 ŚĀRṆGADHARASAMGRAHA. ¹³⁶⁴
 SĀRODDHĀRA. ¹³⁶⁵
 SĀRODDHĀRASAMGRAHA. ¹³⁶⁶
 SĀROTṬARANIGHANṬU. ¹³⁶⁷
 SARPADAMŚANAMANTRACIKITSĀ. ¹³⁶⁸
 SARPANIRODHAMANTRAVIDHI. ¹³⁶⁹
 SARVABHŪTACINTĀŚĀRĪRA. ¹³⁷⁰
 SARVAJANAVAŚYAUṢADHA. ¹³⁷¹
 SARVAJVARAKAŚĀYA. ¹³⁷²
 SARVAJVARAVIPĀKA. ¹³⁷³
 SARVAKĀŚABHEŚAJA. ¹³⁷⁴
 SARVĀNGACIKITSĀ. ¹³⁷⁵
 SARVĀṆJANAKALPA. ¹³⁷⁶
 SARVAPARĪKṢAṆA. ¹³⁷⁷
 SARVAROGACIKITSĀRĀTNA. ¹³⁷⁸
 SARVAROGACIKITSĪTA. ¹³⁷⁹
 SARVAROGANIDĀNA. ¹³⁸⁰
 SARVAROGANIVĀRAKAUṢADHAVIDHĀNA. ¹³⁸¹
 SARVASAMGRAHA. ¹³⁸²
 SARVAVĀIDYASĀRASAMUCCAYA. ¹³⁸³
 SARVAVIJAYĪTANTRA. ¹³⁸⁴
 SARVAVIṢACIKITSĀ. ¹³⁸⁵
 SARVAVYĀDHICŪRNAVIDHI. ¹³⁸⁶
 ŚĀŚĀṆKAKIRĀṆA. ¹³⁸⁷
 ŚĀSTRARĀTNAIGHANṬU. ¹³⁸⁸
 ŚĀTĀDHĪKĀṢṬĀŚĪTIPATTRĀṆĪ. ¹³⁸⁹
 ŚĀTAMŪLĀNI. ¹³⁹⁰
 ŚĀTĀŚLOKĪ. ¹³⁹¹
 ŚĀTAUṢADHANĀMĀNI. ¹³⁹²
 ŚĀTAUṢADHĀNI. ¹³⁹³
 ŚĀTAUṢADHAPRATINIDHAYAḤ. ¹³⁹⁴
 ŚĀTAUṢADHAVṚKṢAMŪLANĀMĀNI. ¹³⁹⁵
 ŚĀTĀVARĪTAILANIRMĀNAVIDHI. ¹³⁹⁶
 ŚĀTAYOGAGRANṬHA. ¹³⁹⁷

SATKANṬHARATNĀBHARANA. ¹³⁹⁸
 ŚAṬTRIMŚALLŪTĀSVARŪPA. ¹³⁹⁹
 SAUBHĀGYACINTĀMAṆĪ. ¹⁴⁰⁰
 SAUBHĀGYAŚAMKARĀDI. ¹⁴⁰¹
 SAUBHĀGYAŚUNṬHĪ and PĀRIJĀTĀŚUNṬHĪ. ¹⁴⁰²
 SAUBHĀGYAŚUNṬHYĀDICŪRNAVIDHI. ¹⁴⁰³
 SIDDHAJĪVANATANTRA. ¹⁴⁰⁴
 SIDDHAMŪLIKĀMANTRA. ¹⁴⁰⁵
 SIDDHASĀRASAMGRAHA. ¹⁴⁰⁶
 SIDDHASĀRASAMHITĀ. ¹⁴⁰⁷
 SIDDHASŪRIKALPA. ¹⁴⁰⁸
 SIDDHAUṢADHAMŪLAGRAHAṆAVIDHI. ¹⁴⁰⁹
 SIDDHAUṢADHAPRAKARAṆĀDI. ¹⁴¹⁰
 SIDDHAYOGARATNĀVALĪ or *ratnāvali*. ¹⁴¹¹
 SIDDHAYOGASAMGRAHA. ¹⁴¹²
 SIDDHAYOGASAMUCCAYA. ¹⁴¹³
 SIDDHAYOGODAYA. ¹⁴¹⁴
 SIDDHIRASĀYANAKALPA. ¹⁴¹⁵
 ŚĪGHRACIKITSĀ. ¹⁴¹⁶
 ŚĪGHRABODHANIDĀNA. ¹⁴¹⁷
 ŚĪGRUPUṢPARASĀYANAVIDHI. ¹⁴¹⁸
 ŚĪROROGĀDHYĀYA. ¹⁴¹⁹
 ŚĪROROGANIRNAYA. ¹⁴²⁰
 ŚĪROROGAMANTRACIKITSĀ. ¹⁴²¹
 ŚLEṢMAJVARANIDĀNA. ¹⁴²²
 SNĀYUROGACIKITSĀ. ¹⁴²³
 SNEHAMĀLIKĀ. ¹⁴²⁴
 SPHUṬAVIDYA. ¹⁴²⁵
 ŚṚGĀLAKALPA. ¹⁴²⁶
 ŚRĪPHALAKALPA. ¹⁴²⁷
 STAMBHANAPRAKĀRA. ¹⁴²⁸
 STRĪCIKITSĀMṚTAVILĀSA. ¹⁴²⁹
 STRĪCIKITSĀPADDHATĪ. ¹⁴³⁰
 STRĪGARBHĀŚŪLACIKITSĀ. ¹⁴³¹
 STRĪROGACIKITSĀ. ¹⁴³²
 STRĪVAIDYA. ¹⁴³³
 STRĪVAŚYAVIDHĀNA. ¹⁴³⁴
 SUGRĪVASAMKARĪṆĪVIDYĀ. ¹⁴³⁵
 SUKHĀNANDASŪTRASTHĀNA. ¹⁴³⁶
 SUKHĀNANDAVINODA. ¹⁴³⁷
 SUKHAPRASAVOPĀYAVIDHI. ¹⁴³⁸
 SŪKṢMAPRASĀRA. ¹⁴³⁹
 SULABHAUṢADHASĀDHANA. ¹⁴⁴⁰
 ŚŪLACIKITSĀ. ¹⁴⁴¹

ŚŪLĀDĀNANIDĀNACIKITSĀ.¹⁴⁴²
 ŚUNṬHĪKALPA.¹⁴⁴³
 ŚUNṬHĪRASĀYANAVIDHI.¹⁴⁴⁴
 SŪRANĀDIVATAKĀ.¹⁴⁴⁵
 SŪRYARĀYĀNDHRANIGHANṬU.¹⁴⁴⁶
 SUŚRUTASĀRA.¹⁴⁴⁷

SUVARNAPRABHĀSĪSŪTRA.¹⁴⁴⁸ This Mahāyānasūtra,¹⁴⁴⁹ also called *Suvarṇabhāsa* and *Suvarṇa(pra)bhāṣottamasūtra*, contains some important early medical material. The work, originally in Sanskrit,¹⁴⁵⁰ was translated into Tibetan,¹⁴⁵¹ Khotanese,¹⁴⁵² Sogdian,¹⁴⁵³ Chinese,¹⁴⁵⁴ Uighur,¹⁴⁵⁵ and Mongol.¹⁴⁵⁶

Chapter fifteen,¹⁴⁵⁷ on Sarasvatī, is about a ritual bath, attended by spells and incantations; many fragrant drugs are mentioned.¹⁴⁵⁸

Chapter sixteen,¹⁴⁵⁹ called vyādhīprasāmana, consists of some introductory prose, thirteen verses, and some concluding prose. The introductory prose tells about the śreṣṭhin (foreman of a guild) Jaṭimdhara,¹⁴⁶⁰ who had been active as a medical practitioner during the reign of king Sureśvara. When Jaṭimdhara had grown old and did no longer practise, which resulted in the reappearance of all kinds of afflictions, his son Jalavāhana approached him with the request to transmit the medical science to him. The metrical part opens with this entreaty. The remaining verses contain Jalavāhana's questions and Jaṭimdhara's answers.

Jalavāhana wants to know why and how the senses (indriya) and elements (dhātu) are subject to changes, and during which periods of the year diseases arise. He also asks when vāta, pitta and kapha are liable to become excited and which medicines are suitable to their pacification.

Jaṭimdhara explains that the year is divided into four main seasons of three months' duration: summer, autumn, winter and spring, or six seasons of two months; the senses and the six elements, as well as the digestive processes, show variations in accordance with the seasons; these periodic changes may lead to disorders, in particular during the transition between one season and the next one.

Diseases due to vāta arise during the rainy season, those due to pitta in the autumn, those due to a combination in the winter, and those due to kapha in the summer. The tastes (rasa) to be preferred in one's diet are therefore: snigdha (fatty), uṣṇa (heating), lavaṇa (salty) and sour (amla) during the rainy season; snigdha, madhura (sweet) and cooling (śīta) during the autumn; madhura, amla and snigdha during the winter; kaṣāya (astringent), uṣṇa and kaṭu (pungent) during the summer. Excitement of kapha occurs shortly after the ingestion of food, excitement of pitta during the digestive processes, excitement of vāta at the completion of digestion. Vāta can be counteracted by bṛmhaṇa measures,¹⁴⁶¹ pitta by purgatives (virecana), kapha by emetics (vamana).

The concluding prose relates that Jalavāhana, after the acquisition of this knowledge, began to treat those who were suffering from diseases.

The first and second Tibetan translations give a faithful rendering of this summary of the medical art, some slight adaptations excepted: the rainy season, unknown in Tibet, is replaced by the summer, the summer by the season of spring.

The third Tibetan translation is not based on the Sanskrit original, but on I-ching's Chinese version.

The version in Old Khotanese corresponds more or less to the Sanskrit text, but the parts preserved of a translation in Late Khotanese correspond to I-ching's text.

The *Suvarṇaprabhāsa* was translated into Chinese by Dharmakṣema,¹⁴⁶² Paramārtha, Yaśogupta, Pao Kuei, and I-ching.¹⁴⁶³ Dharmakṣema follows the original rather closely.¹⁴⁶⁴ I-ching's translation presents a much longer text;¹⁴⁶⁵ his version of the story about Jaṭimdhara and Jalavāhana consists of thirty-seven instead of thirteen verses.

The *Suvarṇaprabhāsa* employs the term dhātu for the doṣas and the elements of the body. The Tibetan translators render the term by khams, the usual equivalent of dhātu.

Dharmakṣema and I-ching had problems with dhātu as a term designating the doṣas. Dharmakṣema interprets dhātu as mahābhūta, and, in agreement with this view, adds that they are four in number.¹⁴⁶⁶ He even changes the Sanskrit text and renders the triad of dhātus (dhātutraya) by 'the four mahābhūtas', which creates confusion. I-ching agrees with Dharmakṣema in rendering dhātu with the Chinese characters for mahābhūta, but avoids the difficulty presented by dhātutraya by omitting this word and replacing it by a colourless expression.¹⁴⁶⁷

Vāta, pitta and kapha are translated by wind, heat and water, or by wind, heat and phlegm by Dharmakṣema; I-ching uses heat or yellow heat as the equivalent of pitta.

The term dhātu, when used for the elements of the body, is also interpreted as mahābhūta by Dharmakṣema, although this conflicts with their number. I-ching, who was interested in Indian medicine, was acquainted with the series of seven bodily elements of āyurveda and gives a correct translation of the term.

The Sanskrit text of chapter sixteen of the *Suvarṇaprabhāsa* refers to six elements of the body,¹⁴⁶⁸ which is very remarkable, given the fact that their number is always seven in āyurvedic literature. Unfortunately, the items comprising the series are not listed. I-ching enumerates them in his version and completes the list by adding brain tissue as the seventh element, notwithstanding the fact that āyurvedic works have always śukra (semen) as the last element of the series.

I-ching expanded the verses on the seasons with the names of the six Indian seasons, beginning his list with spring. Both Dharmakṣema and I-ching made, in the same way as the Tibetan translators, some minor changes in the text in order to make the series of four main seasons conform to Chinese climatic conditions.

The views of the *Suvarṇaprabhāsa* on the tastes are very remarkable. The eight tastes it distinguishes are unknown in āyurvedic literature; they are not referred to as representing a heterodox theory in the ātreyaśāstra chapter (Sū.26) of the *Carakasamhitā*. The tastes of the *Suvarṇaprabhāsa* are a mixture of the āyurvedic rasas and guṇas. Noteworthy is the absence of the bitter (tikta) taste.

The relationships between the tastes and the four main seasons are largely in agreement with āyurvedic theory, but some discrepancies made Dharmakṣema and I-ching introduce changes in their translations of the pertinent verses.¹⁴⁶⁹

The bṛmhaṇa remedial measures against vāta diseases are replaced by ghee in the Chinese translations; both Dharmakṣema and I-ching recommend the use of haritakī

as a specific against diseases caused by heat (= pitta).¹⁴⁷⁰

I-ching's translation of the thirteen verses of the *Suvarṇaprabhāsa* consists of twenty-two verses, to which fifteen stanzas are added as an appendix. These stanzas describe the eight branches of āyurveda, the constitutions (prakṛti), signs foreboding death (arīṣṭa), and some important medicinal substances (triphalā, tryūṣaṇa, sugar, honey, ghee, and milk).¹⁴⁷¹

Dharmakṣema translated the *Suvarṇaprabhāsa* between A.D. 414 and 421;¹⁴⁷² I-ching translated it between A.D. 695 and 712.¹⁴⁷³ The Sanskrit text can therefore not be later than the second half of the fourth century.

- SUYOGARATNĀVALĪ.¹⁴⁷⁴
 SVARASAVIṢAMUṢṬĪ.¹⁴⁷⁵
 ŚVETACARMAVYĀDHYAUSADHAVIDHĀNA.¹⁴⁷⁶
 ŚVETAGUṆJĀKALPA.¹⁴⁷⁷
 ŚVETAMUSALĪKALPA.¹⁴⁷⁸
 ŚVETARIṆGAṆĪKALPA.¹⁴⁷⁹
 ŚVETĀRKĀDIKALPA.¹⁴⁸⁰
 ŚVETĀRKAKALPA.¹⁴⁸¹
 TAILABHASMARASAUŚADHAVIDHĀNA.¹⁴⁸²
 TAILĀBHYAṆGANIRNAYA.¹⁴⁸³
 TAILABINDUPARĪKṢĀ.¹⁴⁸⁴
 TAILACŪRṆARASĀYANĀDIVIDHĀNA.¹⁴⁸⁵
 TAILADHĀRĀVAGĀHANAVIDHI.¹⁴⁸⁶
 TAILĀDHIKĀRA.¹⁴⁸⁷
 TAILĀDIVIDHISAMGRAHA.¹⁴⁸⁸
 TAILALEHYAGHṚTĀDIVIDHĀNA.¹⁴⁸⁹
 TAILALEHYAŚUNṬHĪRASĀYANĀNI.¹⁴⁹⁰
 TAILAPĀKAVIDHI.¹⁴⁹¹
 TAILAPARĪKṢĀ.¹⁴⁹²
 TAILAPRAKARĀNA.¹⁴⁹³
 TAILAPRAYOGA.¹⁴⁹⁴
 TAILARASAVIDHĀNĀNI.¹⁴⁹⁵
 TAILĀRṆAVAVIDHI.¹⁴⁹⁶
 TAILASAMUCCAYA.¹⁴⁹⁷
 TAILAVIDHĀNA.¹⁴⁹⁸
 TAILAVIDHI.¹⁴⁹⁹
 TAILAYOGĀḤ.¹⁵⁰⁰
 TAILOPAVEŚANAVIDHI.¹⁵⁰¹
 TAKRACIKITSĀVIDHI.¹⁵⁰²
 TAKRAKALPA.¹⁵⁰³
 TAKRAPADDHATĪ.¹⁵⁰⁴
 TAKRAPĀNAVIDHI.¹⁵⁰⁵
 TAKRASĀDHANĀDIVIDHI.¹⁵⁰⁶
 TĀLĪSĀDICŪRṆA.¹⁵⁰⁷

- TĀLĪSĀDICŪRṆAVINIYOGAVIDHI.¹⁵⁰⁸
 TĀLĪSAVAṬIKĀVIDHĀNA.¹⁵⁰⁹
 TĀMBŪLACARVAṆAVIDHI.¹⁵¹⁰
 TĀMBŪLAGUṆĀḤ.¹⁵¹¹
 TĀMBŪLAKALPA.¹⁵¹²
 TĀMBŪLASĀDHANAVIDHI.¹⁵¹³
 TĀMBŪLAVIDHI.¹⁵¹⁴
 TANTRASĀRA.¹⁵¹⁵

TANTRAYUKTI.¹⁵¹⁶ The treatise deals with the same thirty-six tantrayuktis as those found in Nīlamegha's *Tantrayuktivivāra*,¹⁵¹⁷ and is based on the latter work as explicitly stated by the author himself.¹⁵¹⁸

The work begins with a series of thirty-one verses in which the whole of Nīlamegha's introduction is incorporated. Indu's *Śaṣīlekḥā* and another, unknown, commentary, called *Avatamṣa*, are mentioned in these introductory stanzas, which also contain a detailed table of contents, from which, however, the list of tantradoṣas and the portion on leśakalpanā are missing.

The thirty-six tantrayuktis are defined in ślokas,¹⁵¹⁹ accompanied by an auto-commentary which draws heavily on Nīlamegha's work, being partly identical with it, partly original and more extensive. This commentary, preserved only up to yukti ten, quotes, apart from the authorities also mentioned by Nīlamegha, Indu (12) and Aruṇa (12 and 14), while Nīlamegha is repeatedly referred to as Megha.¹⁵²⁰ The exposition on the tantrayuktis is completed by verses elucidating the other tantraguṇas.

The tantrayuktis form part of a system of ninety-five tantraguṇas, elaborately described by Aruṇadatta.¹⁵²¹ Aruṇadatta is followed closely by the author of the *Tantrayukti*, who repeats Aruṇadatta's prose definitions in verse; he adds one item, thus enlarging upon the number and making a total of ninety-six tantraguṇas. The complete series of tantraguṇas consists, apart from the tantrayuktis, of fifteen types of exposition (vyākhyā), described in eleven ślokas (48–49), seven types of arrangement (kalpanā), described in seven ślokas and a half (49), twenty-one types of basic procedure (āśraya),¹⁵²² described in twenty-three ślokas and one gīti (50–52), and finally of a series of seventeen items which begin with taccḥīlya, described in nineteen ślokas, one gīti and a half-verse of an unusual type (53–55).

A verse follows in which the author expresses his wish that (his) son Tuṅgamānya may benefit from the exposition of these ninety-six alamkāras.

After quoting Vāgbhaṭa (A.s.U.50.154 and 156–157), the author enumerates fourteen tantradoṣas in four ślokas (55), thus deviating from the series of fifteen doṣas given by Aruṇadatta by omitting one of them, namely bhinnakrama (displacement). A series of eleven verses and a half follows, in which the author praises Nīlamegha, the author of the *Tantrayuktivivāra*, and Bhiṣagārya, who composed the *Abhidhānamāñjarī* (56–57). Five verses among these, which describe Nīlamegha's lineage, are taken from the *Abhidhānamāñjarī*. The subject of leśakalpanā, one of the seven types of kalpanā, is taken up again at the end of the work; this topic is dealt with in prose, concluded by four verses (57–60). The author repeats the whole of Aruṇadatta's comment on the term, fol-

lowed by his own exposition in prose, in which he quotes from the *Śivadharmottara*¹⁵²³ and an authority called *Kāla*vedin; the chief terms discussed are (a)niyatāyus, (a)kālamrtyu, and apamrtyu.¹⁵²⁴

The author of the *Tantrayukti* seems to have belonged to the same lineage as Nīlamegha and Bhiṣagārya, or he was a pupil of one of the descendants of this famous line of South Indian physicians.

The author is later than Nīlamegha and Bhiṣagārya, to whom he refers.

TANTROKTACIKITSĀ.¹⁵²⁵
 TANTROKTAUṢADHASAMGRAHA.¹⁵²⁶
 TARKABHĀṢĀ.¹⁵²⁷
 TRAYASTRIMŚADGANAPĀTHA.¹⁵²⁸
 TRAYODAŚASAMNIPĀTACIKITSĀ.¹⁵²⁹
 TRAYODAŚASAMNIPĀTAKALIKĀCİKITSĀ.¹⁵³⁰
 TRIBHUVANATILAKA.¹⁵³¹
 TRIDOṢANIDĀNA.¹⁵³²
 TRIDOṢAPRAŚAMANAUṢADHA.¹⁵³³
 TRIPHALĀCŪRṆAVIDHĀNA.¹⁵³⁴
 TRIPHALĀKALPA.¹⁵³⁵
 TRIVARGAŚRĪPHALĀDINIGHAṆṬU.¹⁵³⁶
 TRṆAJYOTĪKALPA.¹⁵³⁷
 TRṆAJYOTIṢMATĪKALPA.¹⁵³⁸
 TRYAMBAKĪPRĀKRṬA.¹⁵³⁹
 UDAKALAKṢAṆA.¹⁵⁴⁰
 UDARAROGABHEDAPRABHEDANIDĀNACIKITSĀ.¹⁵⁴¹
 UDARAROGACIKITSĀVIDHI.¹⁵⁴²
 UDARAVYĀDHICIKITSĀ.¹⁵⁴³

The *Uḍḍiṣatantra*¹⁵⁴⁴ is a Tantric text on magic,¹⁵⁴⁵ sometimes ascribed to Rāvaṇa, which also appears under other titles. Four versions can be distinguished: (1) *Uḍḍiṣatantra*, a dialogue between Śiva and Pārvatī, (2) *Uḍḍiṣatantra* or *Rāvaṇoḍḍiṣa*, in the form of a conversation between Śiva and Rāvaṇa, (3) *Virabhadratatantra*, and (4) *Kriyoḍḍiṣatantra*.

One of the printed versions of the *Uḍḍiṣatantra*¹⁵⁴⁶ is a treatise on *ṣaṭkarman*¹⁵⁴⁷ in 378 verses, to which a number of mantras have been added. It consists of a dialogue between Śiva and Rāvaṇa and has been arranged in ten chapters. The order of these ten chapters does not agree with the table of contents found in chapter one (1.20–27), where eight chief subjects are enumerated: karṣaṇa, unmādana, vidveṣaṇa, uccāṭana, grāmakasyocchāṭana, jalastambha, stambhana, and vājīkaraṇa, followed by a long list of secondary subjects.

The topics dealt with in the ten chapters are: māraṇa (1), mālānirṇaya and dhānyādināśa (2), mohana (3), stambhana (4), vidveṣaṇa (5), uccāṭana (6), vaṣīkaraṇa and drāvaṇa (7), ākarṣaṇa (8), yakṣiṇīsādhana (9),¹⁵⁴⁸ and indrajāla (10).¹⁵⁴⁹

Topics of medical interest are:¹⁵⁵⁰ practices with the aim of increasing the size of

the male organ (7.20–30) and the size and firmness of the breasts in the female (7.37–43), removing a bad smell from the female genitals (7.45), removing the pubic hair in the female (7.46–50), and tightening the vagina (7.51–54). Chapter ten describes, amongst other things, how to drive away bhūtas who cause diseases (10.8–18), how to make insanity, kuṣṭha and viṣphoṭas appear and disappear again in one's enemies (10.19–31), and how to drive away insects, rats, snakes, etc. (10.32–44); it also contains recipes which are said to cure various women's diseases and female infertility, or to prevent abortion (10.46–93).

The *Uḍḍiṣatantra*, which enjoys great popularity all over India, is quoted as a source in several texts,¹⁵⁵¹ e.g., the *Amṛtasāgara*, *Dattātreyatantra*, Kokkoka's *Ratirahasya*,¹⁵⁵² Nāgārjuna's *Kakṣapūṭa*, Naraśiṃha's *Tārābhaktisudhārnava*,¹⁵⁵³ the *Mantrakhaṇḍa* of Nityanātha's *Rasaratnākara*, and Sarvānandanātha's *Sarvollāsa*.¹⁵⁵⁴

A version of the *Uḍḍiṣatantra* in the form of a dialogue between Śiva and Pārvatī contains a chapter, called *grastabālacikitsā*, which deals with the treatment of children possessed by grahas, and shows a close affinity with the *Kumāratantra*, attributed to Rāvaṇa.¹⁵⁵⁵

ULŪKAKALPA.¹⁵⁵⁶
 UMĀMAHEŚVARASAMVĀDA.¹⁵⁵⁷
 UNMĀDACIKITSĀPAṬALA.¹⁵⁵⁸
 UNMĀDALAKṢAṆACIKITSĀ.¹⁵⁵⁹
 UPADAMŚACIKITSĀ.¹⁵⁶⁰
 UPAYUKTALAGHUVĀIDYA.¹⁵⁶¹
 UPAYUKTAVĀIDYA.¹⁵⁶²
 UṢAHPĀNĪYA.¹⁵⁶³
 UṢĀNIDĀNA.¹⁵⁶⁴
 UTPALEŚVARASĀRASAMGRAHA.¹⁵⁶⁵
 UTTARASTHĀNA.¹⁵⁶⁶
 UTTARAVĀRUNĪKALPA.¹⁵⁶⁷
 VĀHANASĀRA.¹⁵⁶⁸
 VAIDEHASAMGRAHA.¹⁵⁶⁹
 VĀIDYA.¹⁵⁷⁰
 VĀIDYABHĀSKARODAYA.¹⁵⁷¹
 VĀIDYABHĒSAJATARKA.¹⁵⁷²
 VĀIDYABHŪṢAṆA.¹⁵⁷³
 VĀIDYABHŪṢAṆĀDI.¹⁵⁷⁴
 VĀIDYABHŪṢAṆANIGHAṆṬA.¹⁵⁷⁵
 VĀIDYACANDRODAYA.¹⁵⁷⁶
 VĀIDYACIKITSĀ.¹⁵⁷⁷
 VĀIDYACIKITSĀMṚTA.¹⁵⁷⁸
 VĀIDYACINTĀMAṆI.¹⁵⁷⁹
 VĀIDYADARPAṆA.¹⁵⁸⁰
 VĀIDYADĪPIKĀ.¹⁵⁸¹
 VĀIDYADRAVYANĀMASAMUCCAYA.¹⁵⁸²

- VAIDYADRAVYAPARIMĀNANĀMADHEYAVICĀRA. ¹⁵⁸³
 VAIDYADRAVYASĀRA. ¹⁵⁸⁴
 VAIDYADRAVYAYOGA. ¹⁵⁸⁵
 VAIDYAGRANTHA. ¹⁵⁸⁶
 VAIDYAGUṆAPĀṬHA. ¹⁵⁸⁷
 VAIDYAGUṆASĀRA. ¹⁵⁸⁸
 VAIDYAKA. ¹⁵⁸⁹
 VAIDYAKACIKITSĀSĀRAKAUMUDĪ. ¹⁵⁹⁰
 VAIDYAKAGRANTHA. ¹⁵⁹¹
 VAIDYAKAGRANTHAPATTRAṆĪ. ¹⁵⁹²
 VAIDYAKAGUṆASĀRA. ¹⁵⁹³
 VAIDYAKAKOŚA. ¹⁵⁹⁴
 VAIDYAKĀLAJĀNĀNA. ¹⁵⁹⁵
 VAIDYAKALLOLA. ¹⁵⁹⁶
 VAIDYAKALPA. ¹⁵⁹⁷
 VAIDYAKALPABHÜṢAṆA. ¹⁵⁹⁸
 VAIDYAKALPADRUMA. ¹⁵⁹⁹
 VAIDYAKALPATARU. ¹⁶⁰⁰
 VAIDYAKAMĀDHAVĪ. ¹⁶⁰¹
 VAIDYAKAMANORAMĀ. ¹⁶⁰²
 VAIDYAKAMATASĀRASAMGRAHA. ¹⁶⁰³
 VAIDYAKANIGHAṆṬU. ¹⁶⁰⁴
 VAIDYAKANIGHAṆṬUVIṢEṢA. ¹⁶⁰⁵
 VAIDYAKAPARIBHĀṢĀ. ¹⁶⁰⁶
 VAIDYAKAPRASTĀVIKĀSAMGRAHA. ¹⁶⁰⁷
 VAIDYAKARASĀYANA. ¹⁶⁰⁸
 VAIDYAKARATNAMĀLIKĀ. ¹⁶⁰⁹
 VAIDYAKARATNĀVALĪ. ¹⁶¹⁰
 VAIDYAKASAMGRAHA. ¹⁶¹¹
 VAIDYAKASAMGRAHA. ¹⁶¹²
 VAIDYAKASAMHITĀ. ¹⁶¹³
 VAIDYAKASĀRA. ¹⁶¹⁴
 VAIDYAKASĀRACIKITSĀ. ¹⁶¹⁵
 VAIDYAKASĀRASAMGRAHA. ¹⁶¹⁶
 VAIDYAKASĀRĀVALĪ. ¹⁶¹⁷
 VAIDYAKASĀRODDHĀRA. ¹⁶¹⁸
 VAIDYAKAUSTUBHA. ¹⁶¹⁹
 VAIDYAKAVĀDA. ¹⁶²⁰
 VAIDYAKAVIDHI. ¹⁶²¹
 VAIDYAKĪYAPRAYOGA. ¹⁶²²
 VAIDYAKĪYASAMSKRTADRĀVIDAPRATIPADĀRTHAKOŚA. ¹⁶²³
 VAIDYAKUTŪHALA. ¹⁶²⁴
 VAIDYALAKṢAṆA. ¹⁶²⁵
 VAIDYĀLAMKĀRA. ¹⁶²⁶

- VAIDYAMAHĀSĀRARAHASYA. ¹⁶²⁷
 VAIDYAMAHOTSAVA. ¹⁶²⁸
 VAIDYAMĀLIKĀ. ¹⁶²⁹

VAIDYAMANORAMA or CIKITSĀKRAMA. ¹⁶³⁰ This work consists of a collection of recipes in Sanskrit with a commentary in Malayāḷam. The arrangement of the diseases and of the prescriptions against them does not fully agree with one of the established patterns, but has been influenced by the order found in the works ascribed to Vāgbhaṭa.

Part I has twelve chapters: jvara (1), raktapitta (2), asṛgdara (3), ¹⁶³¹ kāsa (4), hidhmā and śvāsa (5), rājayaḥṣman, svarasāda (= svarabheda) and arocaka (6), bhaktarodha (7), ¹⁶³² chardi, hṛdroga and tṛṣṇā (8), madātyaya (9), arśas, raktārśas and udāvarta (10), ¹⁶³³ atisāra, raktātisāra, pravāhikā and gr̥dhrasī (11), ¹⁶³⁴ grahaṇī and viṣūcikā (12).

Part II has eighteen chapters: mūtrakṛcchra (13), prameha, piṭakā, somaroga and mūtrātisāra (14), ¹⁶³⁵ vidradhi and vṛddhi (15), gunma, ¹⁶³⁶ raktagunma, śūla, ānāhādi and jalakūrma (16), ¹⁶³⁷ mahodara (17), pāṇḍuroga, kāmīlā and kumbhakāmīlā (18), śopha (19), visarpa (20), masūrikā, visphoṭaka, kaksyā and śītapitta (21), ¹⁶³⁸ kuṣṭha (22), śvitra and kṛmi (23), vātaroga (24), vātaśoṇita (25), uraḥkṣatādi, sthūlaroga, kṛ-śaroga, vandyā, prasūtiroga and bālaroga (26), ¹⁶³⁹ unmādādi and apasmāra (27), netraroga (28), karṇaroga (29), and pratiśyāyādi (30).

Several subjects are not dealt with at all, in particular many disorders belonging to śalya. Chapters on viṣa, rasāyana and vājīkaraṇa are also absent.

The author and date of this work are unknown.

- VAIDYAMANORAMĀ. ¹⁶⁴⁰
 VAIDYAMANOTSAVA. ¹⁶⁴¹
 VAIDYĀMRṬA. ¹⁶⁴²
 VAIDYĀMRṬASĀRA. ¹⁶⁴³
 VAIDYAMUKHADARPAṆA. ¹⁶⁴⁴
 VAIDYAMUKTĀVALĪ. ¹⁶⁴⁵
 VAIDYANĀMAMĀLĀ. ¹⁶⁴⁶
 VAIDYANAYABODHIKĀ. ¹⁶⁴⁷
 VAIDYANIBANDHA. ¹⁶⁴⁸
 VAIDYANIDĀNA. ¹⁶⁴⁹
 VAIDYANIGHAṆṬU. ¹⁶⁵⁰
 VAIDYĀNUBHAVA. ¹⁶⁵¹
 VAIDYAPADAPRATIPADĀRTHAKOŚA. ¹⁶⁵²
 VAIDYAPADDHATĪ. ¹⁶⁵³
 VAIDYAPRADĪPA. ¹⁶⁵⁴
 VAIDYAPRAKĀRA. ¹⁶⁵⁵
 VAIDYAPRAMEYANIRŪPAṆA. ¹⁶⁵⁶
 VAIDYAPRASTĀVANĀ. ¹⁶⁵⁷
 VAIDYAPRIYAKĀVYA. ¹⁶⁵⁸
 VAIDYARAHASYA. ¹⁶⁵⁹

- VAIDYARAHASYAPADDHATĪ. ¹⁶⁶⁰
 VAIDYARĀJATANTRA. ¹⁶⁶¹
 VAIDYARASAMAÑJARĪ. ¹⁶⁶²
 VAIDYARASĀMṚTA. ¹⁶⁶³
 VAIDYARASARATNA. ¹⁶⁶⁴
 VAIDYARATNA. ¹⁶⁶⁵
 VAIDYARATNĀKĀRABHĀṢYA. ¹⁶⁶⁶
 VAIDYĀRṆAVA. See *Āṣavidyānuśāsana*.
 VAIDYĀRṆAVAMUKURA. ¹⁶⁶⁷
 VAIDYASĀGARA. ¹⁶⁶⁸
 VAIDYASAMGRAHA. ¹⁶⁶⁹
 VAIDYASAMJĪVANA. ¹⁶⁷⁰
 VAIDYASĀMUDRA. ¹⁶⁷¹
 VAIDYASĀRA. ¹⁶⁷²
 VAIDYASĀRAMAÑJARĪ. ¹⁶⁷³
 VAIDYASĀRANIGHANṬU. ¹⁶⁷⁴
 VAIDYASĀRASAMGRAHA. ¹⁶⁷⁵
 VAIDYASĀRASAMUCCAYA. ¹⁶⁷⁶
 VAIDYASĀRASVATA. ¹⁶⁷⁷
 VAIDYASĀRĀVALĪ. ¹⁶⁷⁸
 VAIDYASĀRODDHĀRA. ¹⁶⁷⁹
 VAIDYASARVASVA. ¹⁶⁸⁰
 VAIDYASARVASVACIKITSĀRṆAVA. ¹⁶⁸¹
 VAIDYASARVASVASĀRASAMGRAHA. ¹⁶⁸²
 VAIDYASĀSTRA. ¹⁶⁸³
 VAIDYASĀSTRADĪPIKĀ. ¹⁶⁸⁴
 VAIDYASĀSTRADVIPAÑCĀŚIKĀ. ¹⁶⁸⁵
 VAIDYASĀSTRANIDĀNA. ¹⁶⁸⁶
 VAIDYASĀSTRAPRAVARTAKĀCĀRYANĀMASAMUCCAYA. ¹⁶⁸⁷
 VAIDYASĀSTRASĀRASAMGRAHA. ¹⁶⁸⁸
 VAIDYASAUKHYA. ¹⁶⁸⁹
 VAIDYASIDDHĀNTACANDRIKĀ. ¹⁶⁹⁰
 VAIDYASIDDHĀNTAKAUMUDĪ. ¹⁶⁹¹
 VAIDYASUBHĀṢITA. See *Vaidyakaprastāvīkāsamgraha*.
 VAIDYASŪTRAṬĪKĀ. ¹⁶⁹²
 VAIDYATANTRA. ¹⁶⁹³
 VAIDYAVALLABHA. ¹⁶⁹⁴
 VAIDYAVIDHĀNA. ¹⁶⁹⁵
 VAIDYAVIDHI. ¹⁶⁹⁶
 VAIDYAVIDVAJJANOLLĀSA. ¹⁶⁹⁷
 VAIDYAVIDYĀPRAKĀṢA. ¹⁶⁹⁸
 VAIDYAVIDYĀMṚTA. ¹⁶⁹⁹
 VAIDYAVIDYĀVINODA. ¹⁷⁰⁰
 VAIDYAVIJÑĀNASAMGRAHA or *Vidvadvaidyarañjanī*. ¹⁷⁰¹

- VAIDYAVILĀSA. ¹⁷⁰²
 VAIDYAVINODA. ¹⁷⁰³
 VAIDYAVIṢAYA. ¹⁷⁰⁴
 VAIDYAVIṢAYĀNUKRAMANIKĀ. ¹⁷⁰⁵
 VAIDYAVYĀDHINIGRAHA. ¹⁷⁰⁶
 VAIDYAYOGA. ¹⁷⁰⁷
 VAIDYAYOGARATHA. ¹⁷⁰⁸
 VAIDYAYOGASAMGRAHA. ¹⁷⁰⁹
 VĀJĪKARAṆA. ¹⁷¹⁰
 VĀJĪKARAṆADĪPIKĀ. ¹⁷¹¹
 VĀJĪKARAṆAKALPA. ¹⁷¹²
 VĀJĪKARAṆARATNAMĀLĀ. ¹⁷¹³
 VĀKYAPRADĪPIKĀ. ¹⁷¹⁴
 VAMANAVIRECANAVASTUKATHANA. ¹⁷¹⁵
 VAMANAVIREKĀDICIKITSĀ. ¹⁷¹⁶
 VANASPATYĀDIVIVIDHAKALPA. ¹⁷¹⁷
 VANDĀKALPA. ¹⁷¹⁸
 VANDHYĀCİKITSĀ. ¹⁷¹⁹
 VANDHYĀKALPA. ¹⁷²⁰
 VANDHYĀPRAYOGA. ¹⁷²¹
 VAṆGAKALPA. ¹⁷²²
 VARAUSADHIPRAKARAṆA. ¹⁷²³
 VARGASŪTRAVYĀKHYĀ. ¹⁷²⁴
 VARUNAKALPA. ¹⁷²⁵
 VASANTAKUMĀRĀDIYOGA. ¹⁷²⁶
 VASTUGUṆĀGUṆA. ¹⁷²⁷
 VASTUGUṆAKALPAVALLĪ. ¹⁷²⁸
 VASTUGUṆANIRNAYA. ¹⁷²⁹
 VASTUGUṆAPĀṬHA. ¹⁷³⁰
 VAŚYĀDIPRAYOGA. ¹⁷³¹
 VĀTABHEDAPRABHEDACIKITSĀ. ¹⁷³²
 VĀTACIKITSĀ. ¹⁷³³
 VĀTACINTĀMAṆĪ. ¹⁷³⁴
 VĀTAJVARACIKITSĀ. ¹⁷³⁵
 VĀTAKACŪRṆARASĀYANANIRMĀṆAVIDHI. ¹⁷³⁶
 VĀTANIDĀNA. ¹⁷³⁷
 VĀTAPRAMEHACIKITSĀ. ¹⁷³⁸
 VĀTARAKTACIKITSĀ. ¹⁷³⁹
 VĀTAROGACIKITSĀ. ¹⁷⁴⁰
 VĀTAROGANIDĀNA. ¹⁷⁴¹
 VĀTAROGAŚĀNTĪ. ¹⁷⁴²
 VĀTAŚATAKA. ¹⁷⁴³
 VĀTAŚŪLACIKITSĀ. ¹⁷⁴⁴
 VATSAKĀDIKAṢĀYALAKṢAṆA. ¹⁷⁴⁵

- VĀYUJAMALABANDHACIKITSĀ. 1746
 VĀYUPAÑCAKALAKṢAṆA. 1747
 VĀYUŚOBHĀCİKITSĀ. 1748
 VEGARĀJAVIVEKA. 1749
 VIBODHASĀRA. 1750
 VICITRAROGAKĀRAṆATACCIKITSĀKRAMA. 1751
 VIDVADVAIDYARĀÑJANĪ. See *Vaidyavijñānasamgraha*.
 VIDVADVALLABHA. 1752
 VIDYĀPRAKĀŚACIKITSĀ. 1753
 VIJAYĀKALPA. 1754
 VIṢṢATIGULMANIDĀNA. 1755
 VIṢṢATIPAITYĀDĀNANIDĀNA. 1756
 VIṢṢATIŚLEṢMĀDĀNANIDĀNA. 1757
 VIṢṢATIŚLEṢMĀDĀNANIDĀNACIKITSĀ. 1758
 VĪRABHADRAYANTRA. 1759
 VĪRACINTĀMAṆI. 1760
 VIRECANAKAṢĀYAVIDHI. 1761
 VIRECANAUṢADHAVIDHĀNA. 1762
 VIRECANAVIDHI. 1763
 VIṢACIKITSĀ. 1764
 VIṢAGARBHATAILAVIDHI. 1765
 VIṢAHARACIKITSĀ. 1766
 VIṢAHARAGUṬIKĀNIRMĀṆAVIDHI. 1767
 VIṢAHARAMANTRAUṢADHA. 1768
 VIṢAHARAṆA. 1769
 VIṢAHARATANTRA. 1770
 VIṢAHARAUṢADHA. 1771
 VIṢAKALPA. 1772
 VIṢAMAÑJARĪ. 1773
 VIṢAMUṢṬIKALPA. 1774
 VIṢAMUṢṬITAILAYOGA. 1775
 VIṢĀPAHĀRASTOTRA. 1776
 VIṢAPRATIVIṢACIKITSĀ. 1777
 VIṢAROGAPATHYĀPATHYAVICĀRA. 1778
 VIṢAVIDYA. 1779
 VIṢODDHĀRA. 1780
 VIŚVANĀTHACIKITSĀ. 1781
 VIŚVANĀTHAPRAKĀŚA. 1782
 VIŚVASṚṢṬIVIDHĀNA. 1783
 VIVEKACANDRA. 1784
 VIVIDHACIKITSĀ. 1785
 VIVIDHAJVARAUṢADHANIRMĀṆĀNUPĀNAKRAMA. 1786
 VIVIDHAKALPA. 1787
 VIVIDHAŚVĀSAKĀSAUṢADHACIKITSĀ. 1788

- VIVIDHAUṢADHANIRMĀṆĀNUPĀNACIKITSĀVICĀRA. 1789
 VIVIDHAVYĀDHICIKITSĀ. 1790
 VIVIDHAVYĀDHICIKITSĀUṢADHĀNUPĀNAKRAMA. 1791
 VRAṆACIKITSĀGRANTHA. 1792
 VRAṆAJĀRACŪRNAPURĀṆAJVARAKAṢĀYANIRMĀṆAVIDHI. 1793
 VRAṆANIDĀNA. 1794

VṚDDHASŪRYĀRUNAṢAMVĀDA, a dialogue between Sūrya and his charioteer Aruṇa on karmavipāka. This text, dating from the eighteenth century, is of special interest because of its use of case-histories. 1795

- VṚKṢAKALPA. 1796
 VṚTTARATNĀVALĪ. 1797
 VṚTTASAMKHYĀNIDĀNA. 1798
 VYĀDHIDHVAMSINĪ. 1799
 VYĀDHINIDĀNA. 1800
 VYĀDHINIRNAYA. 1801
 VYĀDHISIDDHĀÑJANA. 1802
 VYĀDHITADAUṢADHANIRMĀṆAVICĀRA. 1803
 VYĀDHYAUṢADHĀNUPĀNAPATHYANIRNAYA. 1804
 VYĀDHYAUṢADHĀNUPĀNAVIDHĀNA. 1805
 VYĀGHRĪKALPA. 1806
 YAKṢMAROGANIDĀNA. 1807
 YĀMALĀṢṬAKATANTRA. 1808
 YANTRAMANTRACIKITSĀVIDHĀNA. 1809
 YAVANACIKITSĀ. 1810
 YOGACANDRIKĀ. 1811
 YOGACANDRIKĀVILĀSA. 1812
 YOGACINTĀMAṆI. 1813
 YOGACŪḍĀMAṆI. 1814
 YOGĀDHĪKĀRA. 1815
 YOGADĪPIKĀ. 1816
 YOGAKALPADRUMA. 1817
 YOGAMĀDHAVA. 1818
 YOGAMAHODADHI. 1819
 YOGAMĀLĀ. 1820
 YOGAMĀLIKĀ. See *Yogasāra*.
 YOGAMAÑJARĪ. 1821
 YOGĀMRṬA. 1822
 YOGANIDHĀNA. 1823
 YOGAPRADĪPA. 1824
 YOGAPRADĪPIKĀ. 1825
 YOGARĀJAŚATAKA. 1826
 YOGARATNA. 1827

- YOGARATNĀKARA. ¹⁸²⁸
 YOGARATNAMĀLĀ. ¹⁸²⁹
 YOGARATNASAMGRAHA. ¹⁸³⁰
 YOGARATNASAMUCCAYA. ¹⁸³¹
 YOGARATNĀVALĪ. ¹⁸³²
 YOGĀRṆAVA. ¹⁸³³
 YOGASAMGRAHA. ¹⁸³⁴
 YOGAŚĀṆKHAṬAKA. ¹⁸³⁵
 YOGASĀRA. ¹⁸³⁶
 YOGASĀRA, also called *Yogamālikā*. ¹⁸³⁷
 YOGASĀRĀVALĪ. ¹⁸³⁸
 YOGAŚATABANDHA. ¹⁸³⁹
 YOGAŚATĀBHIDHĀNA. ¹⁸⁴⁰
 YOGAŚATAPRABANDHA. ¹⁸⁴¹
 YOGATARAṆGIṆĪ. ¹⁸⁴²
 YOGĀVALĪ. ¹⁸⁴³
 YOGĒŚVARA. ¹⁸⁴⁴
 YONIVYĀPACCIKITSĀ. ¹⁸⁴⁵

Chapter 5 Authors and works from Sri Lanka

ARIṢṬAMĀLĀ.¹
 ARIṢṬAŚATAKA.²

ĀRYADĀSA KUMĀRASIMHA³ is the author of the *Kvāthamaṇimālā*, *Kvāthavidhāna-paddhati*, *Laṅkābhaiṣajyamaṇimālā*, and *Mahauśadhanighaṇṭu*.

The *Kvāthamaṇimālā*,⁴ a treatise in 500 verses, contains a collection of kvāthas against various diseases; the recipes are preceded by a *prākkathana* (1–7), giving information on the author; it ends with a *parisamāpti* (501–503) on the purpose of the book and the date of its completion.

The sources used by the author, mentioned in his Preface (*kiñcid vaktavyam*), are: *Āyurvedavijñāna*, *Bhaiṣajyakalpa*, *Bhaiṣajyaratnāvalī*, *Bhāvaprakāśa*, *Bhesajjamaññū-sā*, *Brhannighaṇṭuratnākara*, *Cakradatta*, *Caraka*, *Dhanvantarivaidyaka*, *Gadanigraha*, *Hārīta*, *Sārārthasamgraha*, *Sārasaṅkṣepa*, *Śārngadhara*, *Śataśloka*, *Suśruta*, *Vāgbhaṭa*, *Vaṅgasena*, *Yogadhāraṇa*, *Yogaratanākara*, and *Yogaśataka*.

The materia medica of this work does not contain many unusual items. Some noteworthy names of plants are: *caturasrā* (461), *gomeṇḍa* (458), *masaka* (299), *paśācekṣu* (23; 279), *pañcanālīlatā* (496), *puṣyalaṭā* (497), *puṭakoṣa* (68), *śrīkaṇṭha* (299), *sugandhamudgā* (25), *sugandhivacā* (113),⁵ and *tāmrapaṇṇa* (68).⁶

The *Kvāthamaṇimālā* was completed in A.D. 1939/40.⁷

The *Laṅkābhaiṣajyamaṇimālā*⁸ is a collection of recipes, arranged in twelve chapters (*aṃśa*): (1) an *uddeśa* of an introductory character (10 verses); (2) *kalka* (55 verses); (3) *kvātha* (60 verses); (4) *phāṇṭa* (12 verses); (5) *cūrṇa* (98 verses); (6) *guṭikā* (272 verses); (7) *rasāyana* (146 verses); (8) *saṃdhāna* (39 verses); (9) *taila* (125 verses); (10) *pralepa* (122 verses); (11) *miśrabhaiṣajya* (35 verses); (12) *saṃmiśra* (245 verses); an *upasaṃhṛti* (32 verses) is appended to the last chapter. Both *āyurvedic* and *iatrochemical* formulae form part of this therapeutic compendium.

The author mentions a large number of unusual names of plants, as well as various plants and substances of vegetable origin that were introduced at a later date and are absent from the classical texts.

Noteworthy names are: *agramālī* (12.171), *ākallaka* (9.72), *ākārakarbha* (2.6 and 35; 3.44; 5.84 and 90; 6.147; 10.60; 12.3), *akarkara* (5.54; 12.108), *āmragandha* (9.34),⁹ *āmragandhika* (10.51), *anīśā* (5.71; 12.34), *anitrā* (5.50), *anojā* (10.28,

51, 108, 112), āraṇyairāṇḍa (9.2), arudrā (9.117), bāhubhūti (5.60), bhaṅgā (6.52), bhīrālu (12.96),¹⁰ bhūmiphala (7.23), caināluka (5.29, 39, 55; 12.9), cainamūla (5.12), citrabhaṅṭā(latā) (6.107 and 158; 12.2, 67, 123), citrabhaṅṭāktī (3.43; 6.31), citrabhaṅṭikā (6.25 and 189), copacīnī (3.41 and 48; 7.6, 19, 42, 56), curindra (12.30), dakaśarbaraka (9.34), deśimūla (6.209), devajīraka (2.21 and 42), dharmapattana (6.150 and 243; 9.65),¹¹ dhūmadalā (12.231),¹² dīrghakīla (9.1),¹³ drukilima (9.51),¹⁴ drumibīja (6.27 and 192), gandhaphalī (5.12; 9.60),¹⁵ gañjā (6.207; 7.19; 8.25), gomeṇḍa (6.231), gopīlu (6.222 and 224), haladī (10.18),¹⁶ haṭṭavilāsini (9.76),¹⁷ hemabhaṅṭa (3.23), hemabhaṅṭā (8.11), jaillikabīja (9.91), kaja (6.125; 9.47), kākūṇa (12.95), kapitthapattī (5.82),¹⁸ karpāṭikā (9.34), kartarikā (6.36), kaukīna (10.118), khākhadāphala (7.5), khalakṣīrī (5.14), kharājapūṣpa (12.37), khāsātīla (7.20), khurāsānī (12.20), kolāmapattraka (12.231), kṛṣṇabola (10.46 and 52), kṛṣṇaśarbaraka (6.79), krūrādrū (3.10; 4.1; 6.79 and 197; 8.30 and 36; 9.57; 10.23; 11.19; 12.13, 78, 138), kṣīramāmsā (7.125; 12.105, 116, 124, 126), kucumba (10.86; 12.163), kucumbaka (9.98), kucumbakī (7.20), kūrcālu (3.2, 5, 7; 6.73 and 78; 11.3 and 29), kuṣṭhagandhinī (7.28),¹⁹ kutumbā (12.230), lābhāṅṭī (12.106), latāphenila (9.28), lavaṅgā (5.79 and 91; 7.28), madanakāma (7.44), madhuvallārī (12.108),²⁰ mahābharīvacā (12.21), mahājambuka (4.6),²¹ mālikā (6.78),²² māmsavera (6.1), mārjāramohinī (6.5; 9.120; 10.69), māyāphala (6.24 and 147; 12.20),²³ mṛgākṣīrī (9.92), nāgamarica (10.93), navasandhidruma (12.132), nutāndhā (10.92), pañcapattī (3.23),²⁴ pītarohinī (7.22 and 53),²⁵ pūspadehikā (6.79), raktamālyā (10.81), śaśakapriyā (6.58 and 67), senāpattī (12.126), śivajīraka (6.89), sudhāmūlī (7.20),²⁶ śukabhūruha (9.34),²⁷ sūripattī (9.76), svarṇapattī (6.19; 12.30),²⁸ svarṇavarā (5.59; 6.132; 7.29; 8.1), śvetanīpa (10.97), takkola (5.87 and 88; 7.29; 12.139),²⁹ tallā (9.84), tryasravallī (12.125), vallārīphenila (3.28), vallīphenila (3.25), vanadhūlaka (3.38), vanaśarbara (6.78), viśadhūlī (12.96), vratatīphenila (9.73), vṛtyeraṇḍa (9.76; 12.213), yakṣanāgaraṅga (6.149, 208, 213), yakṣārī (6.186), and yūthikaparnīkā (10.54).³⁰

Noteworthy names of inorganic substances are: ākhpāśāṇa (12.50), aśvapāśāṇa (12.42), khallamajjā (2.12; 5.59; 6.169), marmaropala (6.264), śilāmajjā (6.148 and 211), śilāsnāru (6.148 and 211), śivānta (12.82), śivāntapāśāṇa (12.42), and sphuṭī (10.120).

Opium is repeatedly prescribed; one recipe contains a substitute for opium (2.50–55: ahiphenapratindhi).

One formula was given by some deity to king Buddhadāsa (5.73–77); another formula derives from a sage called Yakṣaujas (6.1–15).

Remarkable names of diseases are: caurikā (10.55: scabies), khoratā (5.68), khoravāta (3.35), klomaroga (2.18), paribhavavyādhi (6.255), phiraṅga (5.34 and 58), phusphusaroga (2.18), plīhasphīti (3.1), pūyameha (12.26), and saṃkrāmakagada (6.12: infectious disease).

The *Mahauśadhanighaṇṭu*³¹ is a short nighaṇṭu written in Sanskrit.

The work enumerates the names and properties of a number of medicinal substances. It consists of 429 verses, arranged in seven chapters. The first seventeen verses are of an introductory nature. The seven chapters are: (1) mahauśadhādivarga

(141 verses); (2) candanādivarga (49 verses); (3) bilvādivarga (67 verses); (4) phala-varga (42 verses); (5) svarṇādivarga (51 verses); (6) saṃmiśravarga (54 verses); (7) saṃkhyāvarga (25 verses on groups of drugs).

Noteworthy drugs described are: ahiphena (1.128–132), anannāsa (pineapple; 4.37–39), bhaṅgā (1.123–127), cāhā (tea; 6.12–14), eraṇḍacirbhīta (4.40–42),³² iśadgola (6.10–11),³³ kāphī (coffee; 6.15), kastūrī (2.33–38),³⁴ kharjūrī (4.32–36),³⁵ raktamarica (6.42–43),³⁶ śatamallā (5.46–51), trikārṣika (7.17),³⁷ three types of trikaṭuka (7.1–4),³⁸ trimada (7.16),³⁹ and three types of triphalā (7.7–12).⁴⁰

The *Mahauśadhanighaṇṭu* has been influenced by the *Bhāvaprakāśanighaṇṭu*.⁴¹ The work was written at the request of K.D. Senāratna for the benefit of Āyurvedic practitioners in Sri Lanka.⁴²

The upasaṃhṛti at the end of the *Laṅkābhaiṣajyamaṇimālā* and the prākāthana of the *Kvāthamaṇimālā* provide information on the author, who belongs to the twentieth century. He was born in Devanagara and studied at the university called Mahāmantrīndra in Rohaṇa, on the banks of the Nilavalāhaka river.⁴³ After completing his studies he settled in Kolamba (Colombo), where he became the chancellor (adhipati) of the Śrī Siddhārtha Āyurvedic College.

The author is a Buddhist, as is obvious from the maṅgalas of the *Kvāthamaṇimālā*, *Laṅkābhaiṣajyamaṇimālā* and *Mahauśadhanighaṇṭu*.

Āryadāsa Kumārasīṃha wrote a large number of books in Siṃhala and Sanskrit. He translated the *Vṛttaratnākara* and *Śārīrāgadharaśaṃhitā* into Siṃhala, composed kāvyas in Sanskrit and Siṃhala, rendered Siṃhala kāvyas into Sanskrit, etc.⁴⁴

AṢṬAPARĪKṢĀ.⁴⁵

ATTHADASSI is mentioned as the author of a *Mañjūsā*.⁴⁶ J. Liyanaratne has convincingly demonstrated that the references in a number of publications to this *Mañjūsā* by Atthadassi derive from an incorrect statement by G.P. Malalasekera,⁴⁷ who based himself on a publication of D.M. De Z. Wickremasinghe,⁴⁸ who cites in his turn a report by W.R. Kynsey.⁴⁹ The attribution of the *Bhesajjamañjūsā* to Atthadassi has therefore no factual basis.

AUŚADHAMUKTĀHĀRA.⁵⁰

BĀLAGRAHAŚĀNTI.⁵¹

BHAIṢAJYAMĀLĀ.⁵²

BHESAJJAKHANDAKA.⁵³

BHESAJJAMAÑJŪSĀ.⁵⁴ This treatise in verse, the only medical work written in Pali, is arranged in sixty chapters (paddhati). Chapters one to eighteen are concerned with general concepts (upaññāsavidhi), drugs (dabbādi), regimen (sadācāra), disorders caused by the suppression of the natural urges (agāmiroganisedha), articles of food (annavyañjana), fluids (davadabba), poisoned foods (savisāhāra), antidotes (paṭivisa), disturbances of digestion (āmabheda), classification of drugs (gaṇa), major treatments (mahākamma), minor treatments (cullakamma), unfavourable omens and other signs

(five chapters: dūtāriṭṭha, gamanāriṭṭha, supināriṭṭha, uppātāriṭṭha, rogāriṭṭha), and general causes of diseases (rogasāmañña). Chapters nineteen to fifty-eight deal with diseases and their treatment; the order of the diseases differs from the arrangements found in other āyurvedic treatises. Chapter fifty-nine is about particular cures. Chapter sixty describes tonics (rasāyana).⁵⁵

Drugs of vegetable origin prevail over rasayogas in the chapters on treatment.⁵⁶

It is often assumed that the work was compiled for the use of Buddhist monks,⁵⁷ which would explain that diseases of women and children, charms, and incantations are excluded.⁵⁸ J. Liyanaratne⁵⁹ disagrees with this view, based, in his opinion, on a wrong interpretation of the introductory stanzas. He claims that the treatise was meant for Buddhist monks and medical practitioners in general; its aim was to help people to maintain their health and enable them to tread the path indicated by the Buddha.⁶⁰

The commentary on the work says that it is a Pali version of the medical science derived from the tradition of Mahābrahmā, Dakṣa, Prajāpati, etc., and expounded in the *Yogārṇava*, *Cintāmaṇisannaya*, *Yogarātnākara*, etc. The major part of the verses on nidāna are actually drawn from the *Aṣṭāṅgahṛdaya*,⁶¹ which is, in general, the most important source, besides the *Carakasamhitā*, *Suśrutasamhitā*, *Siddhasāra*, *Mādhavanidāna*, *Cakradatta*, and *Viṅgasena*.⁶² Among less well known sources are the *Assinasamhitā*,⁶³ *Bindusāra*, *Bhāradvājīya*, *Kumārasamhitā*, *Mahāyāna*, *Nārāyaṇīya*, and *Tikicchāmata*.⁶⁴

The influence of Indian medical works on the author is understandable in the light of the efforts of king Parākramabāhu II, who had many Indian books and scholars brought to his country, having its cultural uplift in mind.⁶⁵

The *Bhesajjamañjūsā* became well known in many Buddhist countries, including Burma, Thailand and Cambodia, and is said to have been translated into several languages.⁶⁶ It is mentioned in a Burmese inscription in Pagan, dated A.D. 1442.⁶⁷

The *Bhesajjamañjūsā* was one of the sources of Āryadāsa Kumārasimha's *Kvāthamañimālā*.

The *Bhesajjamañjūsā* was written by the Chief Elder (Mahāsthavira), head of the Fraternity of the Five Colleges (Paspīruvanmūlasāmī or Pañcapariveṇasamūhanātha), a Buddhist monk of brāhmaṇa origin.⁶⁸

The authorship of the *Bhesajjamañjūsā* is by some ascribed to Atthadassi Thera;⁶⁹ J. Liyanaratne has proved that this claim is unfounded.⁷⁰ The colophon of one MS mentions Anomadassi Saṅgharāja as the name of the author. This Anomadassi has been regarded as the one who wrote the *Daivajñākāmadhenu*, but this identification is rejected by J. Liyanaratne. Another Sinhalese scholar claimed, without any evidence, that the *Bhesajjamañjūsā* was composed by the Pañcamūlapariveṇādhīpati Maṅgala Saṅgharāja Māhimi.⁷¹

The *Bhesajjamañjūsā* was completed in A.D. 1261, during the reign of king Śrī Paṇḍita Parākramabāhu (Parakkamabāhu) II of Daṁbadeṇiya (A.D. 1236–1270).⁷² The year of completion, clearly mentioned in its colophon, is confirmed by the colophon of the sannaya.⁷³

A Sinhalese interverbal paraphrase (sannaya)⁷⁴ on the *Bhesajjamañjūsā* was written

by Saraṇaṁkara.⁷⁵ The colophon states that the commentaries and interverbal paraphrases on the work had become extinct in the course of time, which induced king Vīraparākrama Narendrasimha (A.D. 1707–1739), who was in the possession of the book of gāthās, to invite the Buddhist prelate Vāliviṭṭa Saraṇaṁkara (A.D. 1698/99–1778),⁷⁶ resident of the Uposathārāma, to render that work into Sinhalese. The colophon adds that this Saraṇaṁkara, with the assistance of his teacher Palkuṁburē Atthadassi Thera and his own pupils, wrote a sannaya on chapters one to eighteen and translated the remaining chapters into Sinhalese.⁷⁷ This work was completed in A.D. 1734. The king was so pleased that he presented Saraṇaṁkara with an elephant.⁷⁸

Diyahunnata Dhammajoti, a pupil of Saraṇaṁkara, rendered the *Bhesajjamañjūsā* into Sinhalese; this work is known as the *Yogapiṭakaya*,⁷⁹ quoted in the *Bhesajjamañjūsāsannaya*.

The *Bhesajjamañjūsāsannaya* quotes a large number of earlier authorities and works. Their names or titles are (in Sanskrit):⁸⁰ Agniveśa, Ālambāyaṇīya, Amita-prabhīya or Amṛtaprabhīya, Amṛtadhārā, Amṛtamālā, Amṛtāñjali, Asitasamhitā,⁸¹ Aṣṭāṅgasamgraha, Aśvinīsamhitā, Aurabhra, Bhadrāsāunakīya, Bhāluki, Bhañjaya,⁸² Bhāpekha,⁸³ Bhāradvājīya, Bhela, Bhiṣaṇmuṣṭi, Bhojarājīya, Bindusāra, Buddhavaideha, Cakṣuṣyeṇa, Caṇḍāgra,⁸⁴ Candrāta, Caraka, Cikitsākalikā, Cikitsāmṛta, Dravyāvalī, Gautamīya, Hariścandra, Hārīta, Hiranyākṣīya, Jātukarṇīya, Kāmara-tamālā, Kaṅkāyaṇīya, Kāśyapīya, Kātyāyaṇīya, Kharanāda, Kṛṣṇapurāṇa,⁸⁵ Kṣāra-pāṇi, Kumārasamhitā, Mādhavanidāna, Mahākāśyapīya, Mahābāhaṭa,⁸⁶ Mahāyāna, Māñibhadra,⁸⁷ Mūlāgama, Nāgārjuna, Nārāyaṇīya, Pāṭhaśuddhi, Prayogakoṣa, Prayogarātnākara, Prayogarātnāvalī,⁸⁸ Prayogārṇava, Prayogasamgraha, Prayogasamuccaya, Śākyamata, Sārasamgraha, Siddhayoga, Siddhayogasamuccaya, Suśruta, Tantrasārasamgraha,⁸⁹ Vaidarbhīya, Vaidehīya, Vararuci, Vṛddhagarga, Vṛddhakāśyapīya, Yāvanakīya,⁹⁰ Yogakoṣa,⁹¹ Yogamālā, Yogapiṭaka,⁹² Yogaratnasamuccaya, Yogārṇava,⁹³ Yogasamuccaya, Yogaśataka, and Yogāśīti.⁹⁴

BUDDHAPUTRA, the chief monk of the Mayūrapāda-periveṇa, wrote two medical works in Sinhalese,⁹⁵ the *Prayogarātnāvalīya* and the *Yogārṇava*.⁹⁶

The same author⁹⁷ composed the *Pūjāvalīya*, a religious work, referred to in the *Yogārṇava* and therefore earlier.⁹⁸

The *Prayogarātnāvalīya*⁹⁹ and *Yogārṇava*,¹⁰⁰ which deal largely with therapy,¹⁰¹ resemble the *Sārasamgraha* and have a great deal in common with Ravigupta's *Siddhasāra*.¹⁰² Both works are quoted in the *Bhesajjamañjūsāsannaya*.

Buddhaputra lived in the thirteenth century,¹⁰³ in about the same period as the author of the *Bhesajjamañjūsā*. He mentions in the *Yogārṇava* that he received his daily necessities from Śrī Saṅghabodhi Śrī Bhuvanekabāhu, i.e., king Bhuvanekabāhu I (A.D. 1273–1284).¹⁰⁴

DRAVYAGUṆADĪPAṆĪ.¹⁰⁵

RĀJAGURU KAVICANDRA was the author of the *Abhinavamādhavanidāna*,¹⁰⁶ an abridged and revised version of the *Mādhavanidāna*.¹⁰⁷

The work is arranged in sixty-four chapters, while their number is sixty-nine in most editions of the *Mādhavanidāna*. The order of the diseases is the same as in Mādhava's treatise. The text of the *Abhinavamādhavanidāna* shows variants and some minor additions when compared with the *Mādhavanidāna*.¹⁰⁸

Differences with the latter are: the combination of vātarakta and ūrustambha, mūtrāghāta and āsmaṇ, yonivyāpad and yonikanda in one chapter; a single chapter deals with śārīravraṇa, sadyovraṇa and bhagna; sūtikāroga, stanaroga and stanyaduṣṭi are also described in one chapter. A chapter on śūkadoṣa is absent, although a term designating this group of diseases¹⁰⁹ occurs at the appropriate place in the rogānukramaṇa at the end of the work. Added are chapters on vegagraha¹¹⁰ and trayodaśasanni,¹¹¹ as well as a list of the diseases described (rogānukramaṇa).¹¹²

The *Abhinavamādhavanidāna* was written by Rājaguru Kavicandra of the Śrī Kātyāyana family at the behest of the great king Soḷendrasimha Rājādhirāja of the solar dynasty.¹¹³

Paṇḍit Rājaguru Kavicandra is mentioned as the founder of a line of teachers in the *Vaidyacināṇibhaiṣajyaśaṅgrahaya*,¹¹⁴ translated from Tamil into Siṃhala by an author called Soḷendrasimha or Śeḷendrasimha or Śeḷasimha.¹¹⁵ The editions of this work mention that Rājaguru Kavicandra belonged to a pupillary succession (guruparamparā) of vaidyas who were holding the office of applying unguents to the royal person. He is described as the twin-brother or contemporary (sahajāta) of Rāmacandra Vaidyaratna, who came to the city of Jayavardhana¹¹⁶ in Sri Lanka from the Coḷa country in India. The MSS of the same work, however, mention a Rāmacandra Miśra, adding that he came to Sri Lanka from Kṣīrabhuktideśa.

It has been suggested that Rājaguru Kavicandra may prove to be the same as Rājaguru Śrī Candra, the author of the *Sārasaṃkṣepa*, a work that may be regarded as the therapeutic complement to the *Abhinavamādhavanidāna*.¹¹⁷ The author of the *Sārasaṃkṣepa*, however, is called Rājaguru Śrīcandrabhūsurasūri, and the order of the diseases in his work differs from the arrangement in the *Mādhavanidāna*.

The information on the chronological position of Rājaguru Kavicandra in the *Vaidyacināṇibhaiṣajyaśaṅgrahaya*, which points to the Jayavardhana period (fifteenth-sixteenth centuries), conflicts with the colophon of the *Abhinavamādhavanidāna*, which says that it was written during the reign of Soḷendrasimha Rājādhirāja. Soḷendrasimha may be an epithet and refer to one of the two Coḷa kings who were called Rājādhirāja, namely Rājādhirāja I (A.D. 1044–1054)¹¹⁸ and II (A.D. 1173–1182).¹¹⁹

KUMĀRAUṢADHADARŚANA.¹²⁰

MĀDHAVANIDĀNASĀRA, a work in Sanskrit verse, inspired by the *Mādhavanidāna*, was written on the request of Mahādhirāja Soḷendrasimha by an author referring to himself as the Rājaguru Kavicandrabhīṣagvara. It is assigned to the Koṭṭa (Jayavardhanapura) period (A.D. 1412–1550). The maṅgala of this treatise is identical with that of the *Sarasvatīnighaṇṭu* and praises Nārada.¹²¹

Moggallāna was the author of the *Abhidhānappadīpikā*.¹²² This lexicon in Pāli, inspired by the *Amarakoṣa*,¹²³ deals with plant names and related subjects in its araṇṇavagga, which forms section five of part two of the work.¹²⁴

The author, Thera Moggallāna of the Vilgammūla fraternity, was a resident of the Jetavana Mahāvihāra¹²⁵ in Pulastipura (Polonnaruwa), built by king Parākramabāhu I (A.D. 1153–1186).¹²⁶ He lived during the latter part of this king's reign and is probably different from his namesake and contemporary, the grammarian Moggallāna, who wrote the *Moggallānavyākaraṇa*.¹²⁷

PRAYOGASAMUCCAYA.¹²⁸ A work of this name is quoted in the *Bhesajjamañjūsāsanaya*.

PRAYOGASAMUCCAYASAMKṢEPA.¹²⁹

RĀJASUNDARA was the author of the *Vaidyottamsa*, a twentieth-century work in Sanskrit.¹³⁰

RĀMACANDRA, a brāhmaṇa, originating from Āndhradeśa,¹³¹ was the author of the *Pratikarmasaṃgraha*.¹³²

RATANAPĀLA was the author of the *Yogaśaṃgraha*, a metrical work in Sanskrit.¹³³ ROGĀRISṬAYA, a treatise on nidāna.¹³⁴

ŚAILASIṂHA or Śailendrasimha was the author of the *Vaidyacināṇibhaiṣajyaśaṅgrahaya*, a comprehensive medical work in Sinhalese prose, with a large number of Sanskrit verses, quoted from earlier treatises. Śailasimha's main source was, as indicated in the introductory verses, a Tamil work, probably called *Vaidyacināṇi*, and based, in its turn, on a Sanskrit original, which may be the treatise of this title by Valabhendra.

Śailasimha's work deals with aetiology (nidāna), purification of medicinal substances (dravyaśuddhi), rasayogas, and decoctions (kaṣāya). Surgical treatments are described, but also charms and offerings.

Information about the author and his lineage is given at the beginning of the treatise. Śailendrasimha was a pupil of Candraśekhara, who was a pupil of Siṃhabhaṭṭa. The latter belonged to a line of teachers going back to the brāhmaṇa Paṇḍita Rāmacandra Vaidyaratna, who came to Jayavardhana from the Coḷa country.

Śailendrasimha also wrote the *Vattoruvedapota*, a formulary of medical prescriptions, in which he states to have been the physician to king Viraparākrama Narendrasimha (A.D. 1707–1739), who, in recognition of his services, bestowed on him the title of Rājavidyāśekhara.¹³⁵

DON HENDRIK SAMARATUNGA was the author of the *Yogamuktāvalī*, a Sanskrit treatise, accompanied by a Sinhalese translation, in 322 śloka, arranged in fifteen chapters.

This work, written at the request of Luvis Prērā Rāṇasiṃha, was completed in A.D. 1855.¹³⁶

SĀRĀRTHASAMGRAHA,¹³⁷ a comprehensive medical treatise, in the form of a saṃhitā, written in Sanskrit. It consists of 2,600 verses, mostly in the śloka metre, arranged in forty-eight chapters.

Chapters one to three are concerned with (1) omnia relating to the messenger, etc. (dūtalaṣṇādi), (2) groups of drugs (dravyagaṇa), and (3) diet (annapānavidhi). Chapters four to ten deal with (4) treatment of pregnant women, (5) children's diseases, and (6–10) diseases of the head, eyes, ears, nose and mouth. Chapters eleven to forty-one are about the remaining diseases, arranged in an order that is peculiar to this treatise. Chapter forty-two is about treatment in general, chapter forty-three about pañcakarman, and chapter forty-four about sudation (sveda). The last four chapters are concerned with surgery, toxicology, antidotes, rasāyana and vājīkaraṇa.

The origin of āyurveda is ascribed to Brahmā.

The *Sārārthasamgraha* is said to show many similarities with the works of Vāgbhaṭa and Suśruta. Medical works from South India may also have influenced the author.¹³⁸ The work, described as a compilation, in conformity with its title, also contains original information. Diagrams representing the human body, the bodies of the elephant and the horse, and the bodies of some birds, are given in the treatise, along with directions as to the vital points to be avoided in surgical operations. Incantations and charms are also found in it.¹³⁹

The *Sārārthasamgraha* was one of the sources of Āryadāsa Kumārasimha's *Kvāthamaṇimālā*.

The Sinhalese tradition attributes the *Sārārthasamgraha* to an early king, Buddhādāsa (about A.D. 398–426),¹⁴⁰ presented in the *Cūḷavaṃsa* as a highly skilled physician, who made a sārāthasamgaha of all the medical sciences.¹⁴¹

The Pali chronicles report marvellous cures effected by this king, who systematically erected hospitals in the villages and shelters for crippled and blind people. Buddhādāsa was also reputed for his ability to treat snake-bites.¹⁴² His army disposed of military surgeons and he appointed physicians for the war elephants and horses.¹⁴³

An unknown author wrote a Sinhalese sannaya on the *Sārārthasamgraha* in later times.

The *Sārārthasamgraha*, although attributed to Buddhādāsa, has probably been composed at a later date, since Vāgbhaṭa, whose works were used by the author, is posterior to Buddhādāsa.¹⁴⁴

SĀRASAMGRAHA.¹⁴⁵ A work of this title is quoted in the *Bhesajjamañjūsānnaya*.

SARASVATĪNIGHAṆṬU,¹⁴⁶ a medical lexicon of 348 verses, arranged in six chapters.¹⁴⁷ The maṅgala of the *Sarasvatīnighaṇṭu* is identical with that of the *Mādhavanidānāsāra*.

The author of the work is unknown,¹⁴⁸ but it is often fathered upon Śāśvata,¹⁴⁹ who wrote the *Anekārthasamuccaya*.¹⁵⁰

The *Sārasvata(nighaṇṭu)* is quoted in Meghadeva's commentary on the *Mādhavadravayagaṇa*.

ŚATAŚLOKA.¹⁵¹

The *Śataśloka* was one of the sources of Āryadāsa Kumārasimha's *Kvāthamaṇimālā*.

SIDDHAUṢADHANIGHAṆṬU.¹⁵²

SIDDHISĀRA, in Sanskrit verse and Sinhalese prose. This work appears to consist of excerpts from the *Sārārthasamgraha* and *Varayogasāra*.¹⁵³

B.L.S. SILVA KAWITILAKA was the author of the *Gadaviniścaya*.¹⁵⁴

SĪPPUKULAMĒ DĪPAṆKARA or Yaṭindra Dīpaṇkara was the author of the *Vanavāsanighaṇṭu*,¹⁵⁵ a glossary of the names of medicinal plants in one hundred and four Sinhala verses. The work dates from the eighteenth or nineteenth century.¹⁵⁶

ŚRĪCANDRA wrote the *Sārasamkṣepa*, a work on therapy in Sanskrit, accompanied by a paraphrase in Sinhalese. The *Sārasamkṣepa* is a compilation, containing copious quotations from earlier works.¹⁵⁷

A list of diseases (rogānukrama) and other subjects dealt with is given at the beginning of the work: jvara, atisāra, grahaṇī, vahnimandatā (= agnimāndya), ajīrṇa, viśūci, raktapitta, mūrchanā, kāsa, śvāsa, hikkā, kṣaya, madātyaya, aruci, seka, tṛṣṇā, chardī, hṛdgada, gudavyādhī (= arśas), udāvarta, mūtrakṛcchra, pramehaka, vidradhi, vṛddhi, gulma, śūla, udara, śvayathu, ślīpada, pāṇḍu, kāmālā, visarpaka, kuṣṭha, krimigada, vraṇa, bhagandara, granthīyādi, kṣudragada, masūrī, śtāpītaka, kuṇḍalā, agnidagdha, bhagna, upadaṃśaka, asṛgdara, asthisrāva, pavanāmaya (= vātavyādhī), vātarakta, garbhavātīgada (disorders occurring during pregnancy), śīśugada (= bālāroga), bālagrahākrama, unmāda, apasmṛti, netraroga, karṇaroga, nāsāroga, mukharoga, galāmaya, śīroroga, viṣa, rasāyana, and vājīkaraṇa.¹⁵⁸

The maṅgala shows the author to be a Hindu.¹⁵⁹

A *Sārasamkṣepa* is cited in Anantakumāra's *Yogaratanasamuccaya*. The *Sārasamkṣepa* was one of the sources of Āryadāsa Kumārasimha's *Kvāthamaṇimālā*.

DON SIMON TILLEKERATNE, a Muḍaliyār of Matara, compiled his *Bhesajjunidāne* about A.D. 1760 or a little later. This large work about diseases and their treatment is arranged on the same lines as Śailasiṃha's *Vaidyacintāmaṇibhaiṣajyasamgrahaya*. It is written partly in Sanskrit verses, quoted from earlier treatises, with comments (sannaya) by the author. An interesting feature is the description of eight varieties of phiraṅga (syphilis).¹⁶⁰

VAIDYĀLAKṢARASAMGRAHA, anonymous, in Sanskrit.¹⁶¹

VARASĀRĀRTHASAMGRAHA.¹⁶²

VARAVĀKYA, a collection of recipes; this work is a Sanskrit translation of a Siddha medical text.¹⁶³

VARAYOGASĀRAYA.¹⁶⁴

VĀSUDEVANIGHAṆṬU.¹⁶⁵

VIYARUVISAÜTPATTIYA, i.e., 'the origin of the poison of madness', composed in Sinhalese prose and verse, copiously interspersed with Sanskrit stanzas. This treatise opens with the story of Suśruta's asking his teacher Dhanvantari about the origin of madness; it mentions a bhikkhu Sumana, who suffered from hydrophobia. Dhanvantari's explanation forms the main portion of the work. Subjects also dealt with are: the creation of the world; the rise of the Ikṣvāku dynasty, and the cow-slaughter, permitted by the kings of this dynasty, as the cause of diseases; the origin of madness in animals; the effects of the bite of rabid animals. The colophon states that the system of medical treatments expounded in this work was practised by a brāhmaṇa called Śivagupta, who had come from Bengal and lived in Sri Lanka in the year A.D. 1697/98.¹⁶⁶

VRAṆAROGACIKITSĀ.¹⁶⁷

YOGADHĀRAṆA.¹⁶⁸ This work was one of the sources of Āryadāsa Kumārasimha's *Kvāthamañimālā*.

YOGAMĀLĀ.¹⁶⁹ A text of this title is quoted in the *Bhesajjamañjūsāsannaya*.

YOGARATNĀKARAYA,¹⁷⁰ a comprehensive treatise in Sinhala verses of various metres, based on classical āyurvedic texts.¹⁷¹ The work consists of more than 4,500 verses,¹⁷² arranged in forty-eight or forty-nine chapters,¹⁷³ dealing with the origin of āyurveda, groups of drugs, the treatment of pregnant women and children, the diseases from head to feet, gynaecology, surgery, and the examination of the pulse. The contents resemble those of the *Prayogarātnāvaliya*, *Varayogasāraya* and *Yogārṇavaya*.¹⁷⁴

The *Yogarātnākara* mentions a work called *Mañjūsā*¹⁷⁵ and is referred to as *Yogarātnākara* in the *Bhesajjamañjūsāsannaya*.

It was written by a Buddhist monk who was born in Monaragammana, Mōdarogam or Mōragammana.¹⁷⁶

The date of composition is disputed, but it may be that the treatise was completed in the thirteenth century.¹⁷⁷

YOGAŚEKHARA.¹⁷⁸

Chapter 6 Authors and works on veterinary medicine

ABHINAVACANDRA:¹ *Hayaśāstra*.²

AGNIPURĀṆA. Chapter 287³ deals with elephants, their diseases, and the treatment of these diseases, as taught by Pālakāpya to Lomapāda.

The diseases mentioned are: pākala, pāṇḍuroga, śiraḥśūla, ānāha, mūrṇchā, pādaroga, vepathu, aṭisāra, utkarṇaka, karagraha, galagraha, mūtrabhaṅga, tvagdoṣa, kṛmikoṣṭha, gulma, kaṭuroga, madakṣiṇa, and netraroga.⁴ Chapter 288 is devoted to aśvaśāstra, as exposed by Dhanvantari; chapters 289 and 290 are concerned with the same subject, as taught by Śālihotra to Suśruta.

Chapter 291 is about elephants again; Śālihotra is the teacher.⁵

AGNIVEŚA: *Hastīśāstra*.⁶ Agniveśa or Agniveśya is mentioned as an authority on gajaśāstra in a number of texts on the subject.

AMAREŚVARA: *Siddhayogacikitsā*.⁷

AŚVACIKITSĀŚĀSTRA.⁸

AŚVĀDICIKITSĀ.⁹

AŚVĀDIGUṆA.¹⁰

AŚVADOṢANIRŪPAṆA.¹¹

AŚVAHṚDAYA.¹²

AŚVALAKṢAṆA.¹³

AŚVALAKṢAṆAKRIYĀDI.¹⁴

AŚVALAKṢAṆAŚĀSTRA.¹⁵

AŚVANETRAPARĪKṢĀ.¹⁶

AŚVAPARĪKṢĀ.¹⁷

AŚVAPARĪKṢĀLAKṢAṆA.¹⁸

AŚVAPARĪKṢAṆA.¹⁹

AŚVAPARĪKṢĀTĪKĀ.²⁰

AŚVAPRAŚAMSĀ.²¹

AŚVAŚĀLIHOTRA.²²

AŚVASĀRA.²³

AŚVAŚĀSTRA.²⁴

AŚVATANTRA.²⁵

AŚVĀYURVEDA.²⁶

BASAVA: *Śivattvaratnākara*.²⁷ One chapter (VII.11: 227 verses) is devoted to the science of elephants; two chapters (VII.12: 224 verses; VII.13: 255 verses) are concerned with the science of horses.

The chapter on elephants deals with the mythical origin of elephants²⁸ (4–8), the forests where wild elephants are to be found (9–16),²⁹ the characteristics of elephants according to the forest where they have been captured (17–27ab), six types of elephants according to size (27cd–30),³⁰ the types called bhadra, manda and mrga (31–39), nine types with regard to their amśaka (44cd–70),³¹ the types of character (sattva; 71–82), breeds (anvaya; 83–90), elephants fit for employment, especially by the king (91–112), the elephant during rut (gandhahastin; 113–123ab), anatomy and related subjects (123cd–141), auspicious and inauspicious marks (142–202),³² the fluid that exudes from an elephant's temples when it is on must (mada; 203–204), the thrusts of an elephant with its tusks (dantāghāta; 205–212),³³ auspicious characteristics of a female elephant (213–218ab), and the praise of elephants (218cd–225); the chapter ends with a summary of its contents (226–227ab).

The first chapter on horses describes the origin of horses, donkeys and mules (1–21ab), the classification of horses according to their colour (varṇa; 21cd–33ab), the constitutions (prakṛti; 33cd–41), the eight types of characteristics of horses (42),³⁴ the characteristics with regard to their body and the sizes of its parts (43–70ab) and the colour of the hair (70cd), horses of more than one colour³⁵ (71–92), bodily defects (93–101ab), the sheens (chāyā; 101),³⁶ trot (102), smell (103–104) and ways of neighing (105), the character types of horses (sattva; 106–107),³⁷ the whirls of hair (āvarta) and their meaning (108–185),³⁸ the determination of the age of horses by means of their teeth (186–189), the characteristics of a long-lived horse (190), the determination of the span of life by means of lines on the nostrils (protharekhā; 191–208), and auspicious and inauspicious characteristics (209–224).

The second chapter on horses is concerned with horses coming from various regions (1–140), auspicious marks again (141–145), topics relating to the mounting of a horse and its training (146–169ab), the regional divisions (kṣetra, daśā) of the body of a horse (169cd–178ab), and the deities presiding over the different parts of the body of a horse (178cd–186ab). The remaining part of the chapter is about chariots (192–197), bullocks (198–226ab), cows (226cd–239),³⁹ and the treatment of some diseases in the animals mentioned (240–253ab).

BHOJA:⁴⁰ (a) *Rājamārtanḍa*; (b) *Śālihotra*; (c) *Yuktikalpataru*.

(a) The *Rājamārtanḍa* contains a chapter on veterinary medicine.⁴¹

(b) The *Śālihotra*⁴² consists of 238 verses, which are for the greater part also found in Nakula's *Aśvacikitsita*.⁴³

The subjects dealt with are: horses of uniform and mixed colours (1–7), the whirls of hair (āvarta or bhrāmara; 8–27), the measures of the various parts of a horse's body (aśvapramāṇa; 28–34), the speed (vega; 35–44), rules for riding (ārohaṇa; 45–56), pathophysiology (śleṣmaraktalakṣaṇa; 57–80),⁴⁴ bloodletting (raktamokṣaṇa; 81–91), the regimen during the seasons (ṛtucaryā; 92–117), errhines (nasya; 118–122), poultices (piṇḍa; 123–128), the construction of stables (hayāgāra; 129–131),⁴⁵ and

some recipes (132–138).

Some verses are accompanied by short glosses.

(c) The *Yuktikalpataru*⁴⁶ contains sections on horses (aśvayukti; 181–197), elephants (gajayukti; 198–206), bulls (vṛṣayukti; 206–210), buffaloes (mahīṣayukti; 210–211), deer (mṛgayukti; 211–212), dogs (sārameyayukti; 213–214), and goats (ajayukti; 214–215).⁴⁷

The subjects of the aśvayukti are: the origin of horses and the various breeds, the measures of the various parts of their body, their colours, the determination of their age, various auspicious characteristics, the whirls of hair, major defects, signs foreboding death, rules for training and riding, the speed of horses, bloodletting, the regimen during the seasons, and various types of horses.

The gajayukti deals with types (jāti) of elephants, their qualities, and their defects. The yuktis on bulls, etc., describe types of these animals and their good or bad qualities.

The verses on horses are partly also found in Bhoja's *Śālihotra*.⁴⁸

Authorities quoted or referred to are: Bhoja (194, 201, 207, 212, 214), Garga (208), Gārgya (205, 212), Nakula (183), Pālakāpya (205), *Pārāśarasamhitā* (196), Śālihotra (197), Śāṅkha (212),⁴⁹ and Vātsya (195⁵⁰ and 207).⁵¹

BRHASPATI: (1) *Aśvalakṣaṇa*;⁵² (2) *Gajalakṣaṇa*.⁵³

BUBBUHA is mentioned as an expert in *Hastisāstra* in Śīlāṅka's *Caṭṭhapaṇṇamahāpurisacariya*.⁵⁴

BUDDHISENA.⁵⁵

DAYASIMHA: *Aśvasāstra*.⁵⁶

DEVĪDATTA: *Aśvasamketacikitsākalikā*.⁵⁷

DĪPAṆKARA: *Aśvavaidyaka*.⁵⁸

DURLABHAGAṆA: *Siddhopadeśasamgraha*.⁵⁹

DURLABHARĀJA:⁶⁰ (1) *Hastiparīkṣā*;⁶¹ (2) *Turaṅgaprabandha*.⁶²

GAJACIKITSĀ.⁶³

GAJALAKṢAṆA.⁶⁴

GAJAMŪTRĀṆJANAPRAYOGA.⁶⁵

GAJANIRŪPAṆA.⁶⁶

GAJAPĀLANACIKITSĀDI.⁶⁷

GAJAPARĪKṢĀ.⁶⁸

GAJAPRAŚAMSĀ.⁶⁹

GAJAŚĀNTI.⁷⁰

The GAJAŚĀSTRA⁷¹ is a treatise on elephants compiled by an unknown author; it is accompanied by a translation in Marāṭhī verse by Śarabhendra.⁷²

The work consists of two parts, a gajaśāstra in 756 verses, arranged in ten chapters (prakaraṇa), and a gajaśāstrānubandha, an appendix, of 696 verses, divided into a large number of chapters.⁷³

The *Gajaśāstra* opens with a maṅgalācaraṇa and a homage to Pālakāpya. Chapter

one (pālākāpyotpatti or pālākāpyacaritra; 106 verses) deals with stories about Pālākāpya.⁷⁴ Chapter two (diggajātatsamānātadvamśīyagajalakṣaṇakathana; 64 verses) describes the origin of elephants in general, and that of the eight elephants of the quarters of the sky (diggaja) and their females in particular;⁷⁵ it also describes the characteristics of the descendants of the diggajas,⁷⁶ and adds some verses on the deities presiding over the different parts of an elephant's body. Chapter three (gajaśāpānugrahaṇakathana; 40 verses) explains particular characteristics and behavioural patterns of elephants as resulting from curses by Dīrghatapas, Agni, Brahmā, Varuṇa and Bhṛgu;⁷⁷ it ends with a story telling how Brahmā bestowed his favour on the elephants. Chapter four (vanagajalakṣaṇanirūpaṇa; 27 verses) deals with the eight major and eight minor forest regions where wild elephants are found and the characteristics of elephants roaming there.⁷⁸ Chapter five (gajavayolakṣaṇa; 99 verses) describes the stages of life of an elephant and mentions its name in each of them, from the first to the twelfth month of the first year of life, from the second to the tenth year, and from the second to the twelfth decade;⁷⁹ two other series of the stages of life are quoted from other treatises;⁸⁰ elephants are, according to their age, divided into the categories *uttama* (superior), *madhyama* (intermediate) and *adhama* (inferior); the chapter ends with verses on the stages of life quoted from the *Vaiśampāyānīya*.⁸¹ Chapter six (deśabhedabhinnaḥ gajalakṣaṇagajagrahaṇakathana; 36 verses) is concerned with the characteristics of elephants coming from different regions⁸² and with the capturing of elephants. Chapter seven (bhadramandamrgasamkīrṇagajalakṣaṇa; 74 verses) is about the *bhadra*, *manda*, *mṛga*, and mixed types of elephants.⁸³ Chapter eight (brahmādyamśavarnachāyāgandhasattvasvaralakṣaṇa; 105 verses) treats classifications of elephants with regard to their *amśa*,⁸⁴ colour (*varṇa*),⁸⁵ sheen (*chāyā*),⁸⁶ smell (*gandha*),⁸⁷ character (*sattva*),⁸⁸ and trumpeting (*svara*);⁸⁹ the character types are described a second time on the basis of a work by Vyāsa.⁹⁰ Chapter nine (gajagatīlakṣaṇādīkathana; 52 verses) deals with a variety of subjects: the gait (*gati*) of elephants,⁹¹ their *āvartas*, major defects (*mahādoṣa*),⁹² and measurements (*parimāṇa*).⁹³ Chapter ten (*bāhyāli*; 151 verses) is about the ways of being seated (*āsana*) on an elephant,⁹⁴ driving elephants by means of the goad (*śṛṅgpranīdhi*),⁹⁵ the feet (*pādapranīdhi*)⁹⁶ and words (*vākpranīdhi*),⁹⁷ the pruning of the tusks (*dantaccheda*),⁹⁸ thrusts with tusks (*dantāghāta*),⁹⁹ the seven beauties of must (*madaśobhā*),¹⁰⁰ the seven stages of must,¹⁰¹ the elephant-fight (*bāhyāli*) and -sport (*gajakṛīḍanaka*), and the ways of pricking with the goad (*śṛṅghāta*).

The subjects dealt with in the *gajaśāstrānubandha*¹⁰² are: the praise of the force of elephants, capturing wild elephants,¹⁰³ the determination of their age, the female elephant and its pregnancy,¹⁰⁴ the *gandhahastin*,¹⁰⁵ the care for and training of elephants after capturing them,¹⁰⁶ the mounting of elephants, must, the twelve regions (*kṣetra*) of an elephant's body,¹⁰⁷ the price of elephants, the pruning of their tusks,¹⁰⁸ the treatment of diseases, the care for young elephants, the types of elephants called *bhadra*, *manda* and *mṛga*, rules for the administration of medicines, the properties of articles of food and medicinal substances, the treatment of various disorders, clysters, errhines, the administration of medicines to elephants of various ages, and the construction of stables.¹⁰⁹

Authorities and works quoted or referred to are:¹¹⁰ *Pālākāpya* (7.36), *Vaiśampāyānīya* (5.86–99; 7.32–33; 9.25–32), *Vaiyāsikya* (7.12–18, 25–31, 37–41; 10.42–44),¹¹¹ and *Vyāsa* (6.17; 8.3 and 85–95). The introductory verses state that the *Gajaśāstra* is based on the works by Pālākāpya and other sages.¹¹²

The author of the *Gajaśāstra* is unknown.

The work is probably later than Nilakaṇṭha's *Mātāṅgalīlā*, which dates from the sixteenth century.¹¹³

GAJAVAIDYA.¹¹⁴ This treatise is in the form of a dialogue between a king of Aṅga and Pālākāpya; it contains a great deal of mythological matter about elephants; it deals, among other things, with the methods of taming elephants and the treatment of their diseases.¹¹⁵

GAJĀVARTALAKṢAṆA.¹¹⁶

GAJĀYURVEDA.¹¹⁷

GAṆA, son of Durlabha: *Aśvāyurveda* or *Siddhayogasamgraha*.¹¹⁸

The *Aśvāyurveda* is a treatise on horses and their diseases; it is described as a *saṃhitā* of 6,000 verses, arranged in six sections (*sthāna*).

The names of these sections are: (1) *lakṣaṇa*, (2) *rasavyākaraṇa*, (3) *kalpasūtra*, (4) *nīdāna*, (5) *cikitsā*, and (6) *rahasya*.¹¹⁹ The author states that he took his material from the works of Śālihotra, Suśruta, Garga, and Dinapati.

Some names of diseases mentioned in the introductory part are:¹²⁰ *āmaṇḍaka*, *aṇḍacālī*, *aṇḍākṣa*, *aṇḍaskanna*, *añjalīkārīkā*, *aśrupāta*, *anusakanna*,¹²¹ *bhārābhiṣaṇṇa*, *budbuda*, *damśapaittika*, *drauṇīkā*,¹²² *ekāṅgaroga*, *kāca*, *kaphāṇḍa*, *koṣṭharāji*, *krīmikoṣṭha*,¹²³ *liṅgita*,¹²⁴ *muñja*, *muñjajāla*, *nirāṇuka*, *parisrāvi*, *paṭala*, *pittāṇḍa*,¹²⁵ *prakoṭaka*, *prakuñcaka*, *praskanna*,¹²⁶ *pratitūrṇa*, *prāvāraka*, *puṇḍarikagraha*, *pūyāṇḍa*, *raktāṇḍa*, *rātrivāta*, *siṅghānaka*,¹²⁷ *svacchanda*, *ulūkapādasthānaruj*,¹²⁸ *unnīta*, *vālādaka*, *vātabalāsaka*,¹²⁹ *viduragraha*, *vidyutkṣipta*, and *yoktrābhitāpa*.

The *Sārasamgraha* prescribes meat broth in the treatment of *vāta* diseases.¹³⁰

Gaṇa's *Aśvāyurveda* is quoted in Mitramisra's *Vīramitrodaya*.¹³¹ The same work contains verses from Gaṇa's *Aśvacikitsita*.¹³² The *Gaṇagrantha* by Gaṇa is quoted in Nakula's *Aśvaśāstra*.

A.C. Burnell assigned Gaṇa's work to the eleventh or twelfth century.¹³³

The author mentions the Rattaula, a tenth-century family of Jain princes of central Telingana,¹³⁴ and refers to the Muslims, which shows that he may indeed have lived in the eleventh or twelfth century.

GARGA: *Aśvāyurveda*.¹³⁵

GARUḌAPURĀṆA. One of the chapters of this work¹³⁶ deals with *aśvāyurveda* and *gajāyurveda*.¹³⁷ The verses on *aśvāyurveda* are based on Nakula's *Aśvacikitsita*.¹³⁸

GHORĀ NIDĀN, a treatise on horses and the treatment of their diseases in Hindi.¹³⁹

GODĀVARAMĪŚRA: *Hariharacaturaṅga*.¹⁴⁰ This work is an elaborate treatise on politics and military science, with special reference to the techniques of warfare¹⁴¹ and the army with its fourfold classification.

The work consists of about 3,000 verses, arranged in eight chapters (pariccheda), which are concerned with (1) elephants (gaja; 813 verses),¹⁴² (2) chariots (ratha; 14 verses),¹⁴³ (3) horses (aśva; 837 verses),¹⁴⁴ (4) foot-soldiers (patti; 18 verses), (5) archery (dhanurvidyā; 399 verses),¹⁴⁵ (6) political science (nīti; 503 verses), (7) war (yuddha; 196 verses), and (8) playful exercises (krīdā; 165 verses).

The chapter on elephants deals, after a series of introductory verses, with the following subjects:¹⁴⁶ deities associated with various parts of an elephant's body (17–19);¹⁴⁷ a eulogy of elephants (20–31); the mythical origin of the four classes (jāti) of elephants, called bhadrā, mandā, mṛga and miśra, in the four ages of the world called Kṛta-, Tretā-, Dvāpara-, and Kaliyuga (32–44);¹⁴⁸ the eight forest regions where elephants come from, the location of these forests, and the class of elephants to be found in each of these regions (45–61);¹⁴⁹ the characteristics of the classes of elephants, divided into sāttvika, rājasa and tāmasa types, according to the views of Brhaspati and Pālākāpya (62–164); the classification of the mixed types of elephants according to the views of Yājñavalkya, Rājaputra,¹⁵⁰ Agniveśa, Gautama and Kāśyapa (165–199); division of the mixed types into superior and inferior categories (200–210); the five ways of communicating with elephants (vedita; 211–220); the classification of elephants with respect to their habitat (221–236); the classification of elephants according to the four varṇas (brāhmaṇa, kṣatriya, vaiśya, śūdra; 237–250); the size of bhadrā, mandā and mṛga elephants (251–258); terms designating the parts of an elephant's body (pradeśa; 258–317); auspicious and inauspicious characteristics of the main parts, together with their meaning (śubhāśubhalakṣaṇa; 318–539); the relative importance of defects, compared to each other (540–557); types of irritability (krodha; 558–562); the gait of elephants (gati; 562–566), their velocity (vega; 567–573), perspiration (sveda; 574–576), trumpeting and other sounds (svara; 577–589), and exhalation (niśvāsa; 590–594); the colours of elephants (varṇa; 594–602), their sheen (chāyā; 603–611),¹⁵¹ strength (bala; 612–624), and sattva (625–642); thrusts with the tusks (dantaghāta; 643–655);¹⁵² mada and its physiology (656–669); the seven stages (avasthā) of mada, and the views of Brhaspati, Pālākāpya and Vyāsa on the subject (670–697); elephants in heat (698–711); elephants suitable for use in battle (sāmgrāmika; 712–738);¹⁵³ elephants suitable for use in the consecration ritual of a king (abhiṣeka; 739–742);¹⁵⁴ elephants unsuitable for use in battle (743–795);¹⁵⁵ signs indicating the life span of elephants (795–813).¹⁵⁶

The chapter on horses deals, after a series of introductory verses, with the following subjects: the mythical origin of horses, their division into brāhmaṇa, kṣatriya, vaiśya, śūdra, and mixed classes (varṇa), followed by the story relating how horses lost their wings (19–69);¹⁵⁷ the regions (āśraya) where horses are to be found (69–76); the fifty-four breeds (kula) of horses, named after these regions, together with their characteristics (77–211);¹⁵⁸ the characteristics of horses named after the four varṇas (212–248) and after mixed castes (249–267); the characters (sattva) of horses, divided into sāttvika, rājasa and tāmasa types, which correspond with the classes called bhadrā, mandā and mṛga (268–283);¹⁵⁹ the seven varieties of śuddha sattva, six varieties of rā-

jaśa sattva, and three varieties of tāmasa sattva (284–307);¹⁶⁰ anatomy (pradeśa; 308–356);¹⁶¹ the measurements (māna) of various parts of a horse's body and their effects on the qualities (357–404);¹⁶² the five varieties of beauty (śobhā; 405–425); the types of perspiration (sveda; 426–429);¹⁶³ auspicious and inauspicious characteristics of the various parts of the body (śubhāśubha; 429–604); the whirls of hair (āvarta; 604–607), their shapes (samsthāna; 608–613),¹⁶⁴ and their classification (614–619);¹⁶⁵ the description of these whirls and their auspicious or inauspicious meaning (620–722);¹⁶⁶ the colours (varṇa) of horses and their several varieties (723–732);¹⁶⁷ horses suitable for use in battle (733–749); defects in horses (750–762); the life span of horses¹⁶⁸ and the determination of their age by means of particular characteristics, especially of their teeth (762–812); the kṣetras in relation to the life span (813–826); signs indicating the life span (827–837).

Authorities and works referred to by Godāvara in the *Hariharacaturaṅga* are, apart from those already mentioned: *Ācārācintāmaṇi* (6.501), *Advaitadarpaṇa* (6.502),¹⁶⁹ *Bhārata* (7.2),¹⁷⁰ *Brhaspati* (6.17), *Dhanurveda* (5.2),¹⁷¹ *Īśānasamhitā* (5.2),¹⁷² *Jayacintāmaṇi* (6.407),¹⁷³ *Manu* (6.17), *Nītikalpalatā* (6.500),¹⁷⁴ *Sārasaṃgraha* (5.3), *Śrīkodaṇḍacaturbhujā* (5.2),¹⁷⁵ *Tantracintāmaṇi* (5.383; 7.59–60),¹⁷⁶ *Uśanas* (6.17), and *Viracintāmaṇi* (5.2).¹⁷⁷

The author mentions his name, Godāvara, in the introductory verses (3 and 4) and in the last verse of his treatise.¹⁷⁸ Earlier works written by him are referred to; these works are: *Ācārācintāmaṇi*,¹⁷⁹ *Advaitadarpaṇa*,¹⁸⁰ *Nītikalpalatā*, and *Tantracintāmaṇi*.¹⁸¹ He also composed a *Sānudrikakāmadhenu*,¹⁸² *Jayacintāmaṇi*,¹⁸³ and *Yogacintāmaṇi*.¹⁸⁴

Godāvara was a son of Balabhadra,¹⁸⁵ who was rājaguru of the Gajapati kings Puruṣottama Deva (A.D. 1466–1497) and his successor, Pratāparudra Deva.¹⁸⁶ Balabhadra was a son of Gaṅgādhara Miśra, son of Jaleśvara Miśra, son of Mṛtyuñjaya Miśra of the Kautsagotra.¹⁸⁷

The author was a minister (mantrivara) and preceptor (rājaguru) of Pratāparudradeva, who conferred on him the titles of kavipuṅgava and paṇḍitarāja; this king presented him with a white umbrella, called meghādambara,¹⁸⁸ decorated with four golden lions and a golden pitcher. Godāvara also bore the title of vājapeyayājñin.¹⁸⁹

Godāvara's patron, Pratāparudradeva, has been identified as the Gajapati king of this name who ruled in Orissa from A.D. 1497 to about 1540.¹⁹⁰ This king appointed him to the same office as his father in about A.D. 1510.¹⁹¹

GOPĀLADĀSA KĀYASTHA: *Karāṭikautuka*.¹⁹²

GOTAMA: *Gavāyurveda*.¹⁹³

GOVAIDYA.¹⁹⁴

GOVAIDYASĀSTRA.¹⁹⁵

GUṆĀKARA: *Karicikitsāsāroddhāra*.¹⁹⁶

HAMSADEVA: *Mṛgapakṣiśāstra*.¹⁹⁷ This is a zoological treatise in Prakrit, describing 225 mammals and birds in 1,700 verses. The species enumerated are arranged in thirty-six groups (varga) and six main categories (three rājasa and three tāmasa categories).

The author, a Jain from South India, is assigned to the thirteenth century. He wrote

his treatise on the request of Saudadeva, the Jain king of Jinapura, who decided to stop hunting and to acquire knowledge about wild animals and birds.¹⁹⁸ The work has been translated into English,¹⁹⁹ but the Prakrit text has not been edited.²⁰⁰

The Sanskrit version of the *Mṛgapakṣiśāstra*²⁰¹ consists of two parts, preceded each by an introductory pūrvapīthikā (of thirty-four verses), and arranged in twenty-one sections (śreṇī) on mammals, respectively thirty-six sections on birds. Each section is devoted to one particular mammal or bird or to particular groups of these animals.

The sections of part one describe:²⁰² (1) *siṃhaguṇādi* (the lion and its varieties): *siṃha*,²⁰³ *mṛgendra*, *pañcāśya*, *haryakṣa*, *kesarin*, *hari*, *siṃhī* (35–106ab); (2) *vyāghraguṇādi*: *śārdūla*, *dvīpin* (the leopard),²⁰⁴ *vyāghra* (the tiger)²⁰⁵ (106cd–146); (3) *tarakṣuguṇādi*: *tarakṣu* (the hyena),²⁰⁶ *mṛgādāna* (the cheetah) (147–163ab);²⁰⁷ (4) *bhallūkaguṇādi*: *ṛkṣa*,²⁰⁸ *acchabhalla*,²⁰⁹ *bhallūka*²¹⁰ (163cd–208); (5) *gaṇḍakaguṇādi*: *gaṇḍaka*,²¹¹ *khaḍga*²¹² (209–232ab); (6) *gajaguṇādi* (the elephant): *dantin*, *dantāvala*, *hastin*, *dvirada*, *gaja*, *bhadraraja*, *mandaraja*, *mṛgaraja*, *saṃkīrṇaraja*, *mataṅgaraja*, *padmin*, *ibha*, *stamberama*, *karinī* (232cd–339); (7) *aśvaguṇādi* (the horse): *turaṅga*, *aśva*, *ghoṭaka*, *arvant*, *vāha*, *gandharva*, *haya* (340–402); (8) *uśtraguṇādi*: *uśtra* (the camel),²¹³ *kramelaka*, *dāseraka*, *mahāṅga* (493–433); (9) *gardabhuṅguṇādi*: *gardabha*, *khara*,²¹⁴ *rāsabha* (434–461); (10) *varāhaguṇādi*: *varāha*,²¹⁵ *sūkara*, *kola*, *potrin*, *kiṭi*, *damṣṭrin*, *bhūdāra*, *śvāvidh*,²¹⁶ *ghṛṣṭi*,²¹⁷ *śalya*²¹⁸ (462–501); (11) *mahiṣaguṇādi*: *mahiṣa* (the buffalo),²¹⁹ *lūlaya*, *vāhadviṣ*, *kāsara*, *sairibha* (502–543); (12) *vṛṣabhuṅguṇādi*: *ukṣan* (the bull), *balīvarda*, *rṣabha*, *vṛṣa*, *mahokṣa*, *saurabheya* (544–591); (13) *dhenuguṇādi*: *gaus* (the cow), *dhenu* (592–616); (14) *ajaguṇādi*: *aja*,²²⁰ *chāga*,²²¹ *meṣa*,²²² *vṛṣṇi*,²²³ *eḍaka*²²⁴ (617–655ab); (15) *harinaguṇādi*: *mṛga*,²²⁵ *kuraṅga*,²²⁶ *vātāyuhariṇa*,²²⁷ *hariṇa*,²²⁸ *vātamṛga*,²²⁹ *kṛṣṇasāra*,²³⁰ *ruru*,²³¹ *nyaṅku*,²³² *śambara*,²³³ *raṅku*,²³⁴ *rohitākṣa*,²³⁵ *gokarṇa*,²³⁶ *eṇa*,²³⁷ *gandharva*²³⁸ (655cd–738ab); (16) *camūrugūguṇādi*: *camūru*,²³⁹ *kandalī*, *cīna*, *priyaka*²⁴⁰ (738cd–751); (17) *kapiguṇādi*: *kapi*,²⁴¹ *plavaṅga*,²⁴² *śākhāmṛga*,²⁴³ *valīmukha*,²⁴⁴ *markaṭa*,²⁴⁵ *vānara*,²⁴⁶ *kīṣa*,²⁴⁷ *vanaukas*²⁴⁸ (752–804); (18) *sṛgālaguṇādi*: *sṛgāla* (the jackal),²⁴⁹ *mṛgadadhūrtaka*,²⁵⁰ *vañcaka*,²⁵¹ *kroṣṭar*,²⁵² *jambuka*,²⁵³ *pheru*²⁵⁴ (805–837); (19) *biḍālaguṇādi*: *biḍāla*,²⁵⁵ *mārjāra*,²⁵⁶ *otu*,²⁵⁷ *ākhubhuj*,²⁵⁸ *medaka*²⁵⁹ (838–874ab); (20) *mūṣakaśālaguṇādi*: *unduru*,²⁶⁰ *ākhu*,²⁶¹ *mūṣaka*,²⁶² *cucundara*,²⁶³ *śāśa*²⁶⁴ (874cd–910ab); (21) *vṛkaguṇādi*: *vṛka* (the wolf), *koka*,²⁶⁵ *iḥāmṛga*²⁶⁶ (910cd–941ab); *śvānaguṇādi*: *śvan*, *kukkura*, *śunaka*, *mṛgadamaṣaka*,²⁶⁷ *sārameya*, *grāmyamṛga* (941cd–973ab); *upasaṃhāra* (summary) (973cd–988).

The sections of part two describe: (22) *hamsādiguṇa*: *hamsa*,²⁶⁸ *cakrāṅga*,²⁶⁹ *mānasavāsin*,²⁷⁰ *rājahamsa*,²⁷¹ *mallikākṣa*,²⁷² *kādamba*,²⁷³ *kalahamsa*²⁷⁴ (1–70); (23) *cakravāṅkaguṇādi*: *koka*,²⁷⁵ *cakra*,²⁷⁶ *rathāṅga*²⁷⁷ (71–100); (24) *sārasabalākācako-raśārāricātakapakṣiguṇādi*: *puṣkara*,²⁷⁸ *sārasa*,²⁷⁹ *balākā*,²⁸⁰ *sāraṅga*,²⁸¹ *cakora*,²⁸² *brhaccakora*,²⁸³ *śārāru*,²⁸⁴ *āṭi*,²⁸⁵ *cātaka*,²⁸⁶ *stokaka*²⁸⁷ (101–168ab); (25) *garuḍa-śyēnaguṇādi*: *garuḍa*,²⁸⁸ *vainateya*,²⁸⁹ *pannagāri*,²⁹⁰ *śyēna*,²⁹¹ *śaśādāna*²⁹² (168cd–211ab); (26) *grdhrabakaguṇādi*: *grdhra*,²⁹³ *dākṣāyya*,²⁹⁴ *ātāyin*,²⁹⁵ *cilla*,²⁹⁶ *kraufica*,²⁹⁷ *baka*,²⁹⁸ *kahva*,²⁹⁹ *kuṇica*³⁰⁰ (211cd–266ab); (27) *kākaguṇādi*:³⁰¹ *kāka*,³⁰² *karaka*,³⁰³ *balipuṣṭa*,³⁰⁴ *sakṛtpṛaja*,³⁰⁵ *dhvāṅkṣa*,³⁰⁶ *ātmanaghoṣa*,³⁰⁷ *parabhṛta*,³⁰⁸ *vāyasa*,³⁰⁹ *cira-ñjīvin*,³¹⁰ *maukuli*,³¹¹ *droṇakāka*,³¹² *kākola*³¹³ (266cd–335); (28) *ulūkaghūkaguṇādi*:

ulūka,³¹⁴ *vāyasārāti*,³¹⁵ *pecaka*,³¹⁶ *kausika*,³¹⁷ *ghūka*,³¹⁸ *divābhīta*,³¹⁹ *niśātana*³²⁰ (336–386); (29) *śukakokilaguṇādi*: *śuka*,³²¹ *kīra*,³²² *śārikā*,³²³ *vanapriya*,³²⁴ *para-bhṛta*,³²⁵ *kokila*,³²⁶ *pika*³²⁷ (387–451); (30) *mayūraguṇādi*: *mayūra* (the peafowl),³²⁸ *barhin*, *nīlakaṇṭha*, *bhujaṅgabhuja*, *śikhāvala*, *kekin* (452–499); (31) *pārāvatacāsa-guṇādi*: *pārāvata*,³²⁹ *kalarava*,³³⁰ *kapota*,³³¹ *cāṣa*,³³² *kikīdivi*³³³ (500–544ab); (32) *kukkuṭaguṇādi*: *kṛkavāku*,³³⁴ *tāmracūda*,³³⁵ *kukkuṭa*,³³⁶ *caranāyudha*³³⁷ (544cd–571); (33) *caṭakakareṭupakṣiguṇādi*: *caṭaka*,³³⁸ *kalavinka*,³³⁹ *karkareṭu*,³⁴⁰ *kareṭu*³⁴¹ (572–598); (34) *lohapṛṣṭhadārvāghāṭapakṣiguṇādi*: *lohapṛṣṭha*,³⁴² *kuraṇṭaka*,³⁴³ *dā-rvāghāṭa*,³⁴⁴ *śatapattra*³⁴⁵ (599–628); (35) *khañjaritādi*: *khañjaritabharadvājaka-li-ṅgapakṣiguṇādi*: *khañjaritā*,³⁴⁶ *khañjana*,³⁴⁷ *vyāghrāṭa*,³⁴⁸ *bharadvāja*,³⁴⁹ *kaliṅga*,³⁵⁰ *bhṛṅga*,³⁵¹ *dhūmyāta*³⁵² (629–672ab); (36) *plavāḍipakṣiguṇa*: *plava*,³⁵³ *tiitiri*,³⁵⁴ *kukkubha*,³⁵⁵ *lāva*,³⁵⁶ *koyaṣṭi*,³⁵⁷ *hārīta*³⁵⁸ (672cd–700).

The treatise ends with a *śāstrapariśamāpti* (701–717).

HASTYĀYURVEDA: anonymous.³⁵⁹

HEMASŪRI: *Aśvaśāstra*.³⁶⁰

HIMMATA BAHĀDURA: *Aśvaphalaprakāśa*.³⁶¹

INDURĀJA.³⁶²

INDUSENA: *Sārasaṃgraha*.³⁶³

JAYADATTA: *Aśvavaidyaka*,³⁶⁴ a treatise in 1,664 verses,³⁶⁵ arranged in sixty-eight chapters (*adhyāya*).

A table of contents is found in chapter one (6–15). Chapters two to sixty-eight deal with: anatomy (*pradeśa*; 2);³⁶⁶ good and bad characteristics of horses (3.1–28),³⁶⁷ their whirls of hair (*āvarta*; 3.29–70),³⁶⁸ the deities presiding over the various parts of a horse's body (3.70–72), the *puṇḍras* (3.73–81),³⁶⁹ the *puṣpas* (3.82–92),³⁷⁰ the *trot* (*gati*; 3.93–97), the colour of horses (3.98–124),³⁷¹ their neighing (*svara*, *heṣita*; 3.125–134), major defects (*mahādoṣa*) in horses (3.135–159),³⁷² portents (*utpāta*; 3.160–170),³⁷³ the sheens (*chāyā*) of horses (3.171–179),³⁷⁴ their characters (*sattva*; 3.180–181),³⁷⁵ the measures of their limbs (*pramāṇa*; 3.182–194); their span of life (*āyus*; 4.1–16), the determination of their age by means of the development of their teeth and the meaning of various characteristics of their teeth (*vayas*; 4.17–34),³⁷⁶ the regional division of their body (*daśā*, *kṣetra*; 5); the racial classification of horses (6); their classification according to the four *varṇas*, *sattva* and *śakti* (7.1–10), the field of pasture (*raṅgabhūmi*; 7.11–12), rules for riding (7.13–73); the treatment of infertility in mares (8); the characteristics of a pregnant mare (9); the care for a mare after dropping its foal (10.1–12), the purification of a mare's milk (10.12–17), the care for the newborn foal (10.18–23); rules for the dosage of medicines (11); materia medica and technical terms (*nighaṇṭu*; 12);³⁷⁷ rules for feeding during the various seasons (13); the application of caustics (*kṣārādāha*; 14.1–6), cauterization (*dāha*; 14.7–20), the employment of surgical instruments (14.21–23); bloodletting (15); clysters (*nīrūha* and *anuvāsana*; 16); errhines (*nasya*; 17),³⁷⁸ sudation (*sveda*; 18); oleaginous drinks (*sneha*; 19); medicated oils (20); medicated ghees (21); the treatment of fatigue (*śrāntopacāra*; 22); signs foreboding death (*ariṣṭa*; 23–25); *mṛgaroga* (26);³⁷⁹ the

causes and signs of excitement of the three doṣas (27); a list of diseases (28); diseases of mouth and throat (29);³⁸⁰ diseases of the eyes (30);³⁸¹ diseases of the head (31); lameness (laṅgita; 32);³⁸² diseases of the ears (33); cough (34); hiccup and shortness of breath (35); wounds and ulcers (vraṇa; 36); siṅghānaka (37);³⁸³ ghr̥ṇiroga (38);³⁸⁴ diseases of the legs and hoofs (pādaroga; 39);³⁸⁵ fever (40); indigestion (ajīrna; 41); diarrhoea (42); colic (śūla; 43);³⁸⁶ udāvarta (44); praskanna (45);³⁸⁷ worms (krmikoṣṭha) and śleṣmakōṣṭha (46); mūtragraha (47);³⁸⁸ kuṣṭha (48);³⁸⁹ swellings (śoṭha; 49); disorders of scrotum and testicles (muṣkaroga; 50);³⁹⁰ aunītaroga (51);³⁹¹ udara (52);³⁹² haemorrhoids (53); utkarṇaka (54);³⁹³ vātavyādhi (55);³⁹⁴ unmāda (56);³⁹⁵ disorders by grahas (57);³⁹⁶ śoṣa (58);³⁹⁷ vāṭabalāsaka (59);³⁹⁸ vyāpad (60);³⁹⁹ toxicology (61); convulsions (āpasmāra; 62); ṣaṭpadībhakṣa (63);⁴⁰⁰ signs indicating curability of a disease or its incurability (64); the constitutions (prakṛti; 65); some kalpas (66–68).⁴⁰¹

The theoretical concepts found in the chapters on diseases and their treatment are the same as those in human āyurveda. Many diseases are divided into doṣic and āgantū types.⁴⁰² The types of treatment do not differ much from those in human āyurveda. Magical and religious elements occur in the chapter on grahas, as well as in that on the rules for riding a horse (7.37–43).⁴⁰³

Jayadatta often refers to Śālihotra as the foremost authority on the science of horses.⁴⁰⁴

Jayadatta is quoted by Bhoja,⁴⁰⁵ Cakrapāṇidatta in his commentary on the *Caraka-saṃhitā*, Mitrāmīśra in the *Vīramitrodaya*,⁴⁰⁶ in the *Śāringadharapaddhati*, and by Ṭoḍara in his *Āyurvedasaukhyā*.⁴⁰⁷

Jayadatta mentions his name and that of his father, Vijayadatta, in the introductory verses of his work (1.4). The colophons call him a great vassal (mahāsāmanta).

The only reliable dates are A.D. 1364, the year of completion of the Cambridge MS, and A.D. 1424, the year in which the India Office MS was written. In a number of articles on horses, P.K. Gode concluded that Jayadatta wrote his work between A.D. 700/800 and 1200/1300.⁴⁰⁸ A. Rahman repeats that the treatise must have been composed between 800 and 1200.⁴⁰⁹ The terminus ante quem is A.D. 1300 according to A.-M. Blondeau.⁴¹⁰ M. Vallauri places the author in the fourteenth or fifteenth century.⁴¹¹

JAYADEVA: Śālihotra or Aśvavaidyaka.⁴¹²

JAYADRATHA: Aśvaśāstra.⁴¹³

JINADĀSA⁴¹⁴ was the author of: (1) *Gajaprabandha*, also called *Gajaparīkṣā* and *Haṭtiparīkṣā*;⁴¹⁵ (2) *Turaṅgaprabandha*.⁴¹⁶ Both works, on elephants and horses respectively, were completed in A.D. 1158.

The same author wrote a *Svapnaśāstra*⁴¹⁷ on auspicious and inauspicious dreams, and began writing a *Sāmudrikatilaka*,⁴¹⁸ also called *Strīpuruṣalakṣaṇa*,⁴¹⁹ the latter treatise was completed by his son, Jagaddeva.⁴²⁰

Jinadāsa was a learned Jain householder, who lived in Gujaraṭ and held the office of minister during the reigns of the Caulukya kings Kumārapāla (A.D. 1143–1174)⁴²¹ and Bhīmadeva II (A.D. 1178–1239).⁴²²

KĀHNAPRABHUVAIDYA: Aśvasāra.⁴²³

KALHAṆA: Aśvasārasamuccaya or Sārasamuccaya.⁴²⁴ Kilhaṇa's Aśvasārasamuccaya and Sārasamuccaya are quoted in Mitrāmīśra's *Vīramitrodaya*.⁴²⁵

KAUṬILYA: Arthaśāstra.⁴²⁶

KĪRTIVARMAN: Govaidya.⁴²⁷

KUMĀRA: Gajacikitsā.⁴²⁸

MAHĀNĀGA: *Kalpanāratnavyākhyāna*: a commentary on Śivārāmbhūpati's *Kalpanāratna*, a work on elephants.⁴²⁹

MAHEŚVARA: Gajacikitsā.⁴³⁰

MALLADEVA PAṆḌITA: Sārasindhu.⁴³¹ A *Vaidyakalpataru* may be by the same author.⁴³²

MĀNAPRIYAMATA.⁴³³

MATSYAPURĀṆA.⁴³⁴

MĀṬṬU VĀKAṬAMUM MĀṬṬU ANKA AṬAIYĀLAMUM, two Tamil treatises on the diseases of cattle and their treatment.⁴³⁵

MOTĪRĀMA AUDĪCYA: Aśvagovrṣalakṣaṇa.⁴³⁶

NAKULA:⁴³⁷ (1) *Aśvacikitsita*; (2) *Aśvaśāstra*.

(1) The *Aśvacikitsita*⁴³⁸ consists of 423 verses, arranged in eighteen chapters (adhyaṃya).⁴³⁹

Chapter one is called praśnādhyāya; the introductory verses invoke the blessing of Śālihotra, son of Turaṅgaghoṣa, and mention that the abbreviated version of Śālihotra's treatise, as made by Nakula,⁴⁴⁰ will be expounded; a short table of contents enumerates the subjects of the chapters of the work;⁴⁴¹ the remaining part (1.5–21) is devoted to the mythical story telling how horses lost their wings.⁴⁴²

The subjects of the other chapters are: the breeds (jāti) of horses,⁴⁴³ and a number of behavioural characteristics considered to be auspicious or inauspicious (2), the colours of horses (varṇa; 3),⁴⁴⁴ the whirls of hair (āvarta; 4),⁴⁴⁵ the development of a horse's teeth (dantodbheda; 5), the measures of the limbs (sarvāvayavapramāṇa; 6), the speed of horses (vega; 7), rules for riding (ārohaṇa; 8), the utility of horses for different purposes and related subjects (vāhana; 9), pathophysiology (dhātuparīkṣā; 10),⁴⁴⁶ the regimen during the seasons (ṛtucaryā), bloodletting (11),⁴⁴⁷ errhines (nasya; 12), poultices (piṇḍa; 13), medicated ghees (ghṛta; 14), decoctions (kvāṭha; 15), toxicology (viṣa; 16), and the construction of stables (aśvaśālā, hayāgāra; 18).⁴⁴⁸

Diseases are not described in the *Aśvacikitsita*.

Some noticeable medicinal substances are: bhrāmārī (13.1), gaṇḍakī (13.12 and

21), *pācā* (15.10), *śataghñī* (13.2), and *viṣakaṇkoli* (16.12).

Śālihotra is frequently referred to as the foremost authority.⁴⁴⁹

(2) The *Aśvaśāstra*⁴⁵⁰ is a treatise in verse, interspersed with prose, of about 650 units, divided into twenty-six chapters.

The subjects are: introduction,⁴⁵¹ the praise of horses, a hymn of praise (*stotra*) to Raivata,⁴⁵² the mythical story telling how horses lost their wings,⁴⁵³ anatomy (*pradeśādhyaya*),⁴⁵⁴ auspicious and inauspicious characteristics (*aṅgalakṣaṇa*),⁴⁵⁵ the eight types of characteristics of horses (*aśvalakṣaṇa*),⁴⁵⁶ the regional divisions (*daśā*, *kṣetra*) of their body, the whirls of hair (*āvarta*),⁴⁵⁷ horses of mixed colours,⁴⁵⁸ the *pundras*,⁴⁵⁹ the *puṣpas*,⁴⁶⁰ the neighing (*heṣita*) of horses, their smell,⁴⁶¹ sheen,⁴⁶² gait (*gati*)⁴⁶³ and character (*sattva*),⁴⁶⁴ the main defects (*mahādoṣa*), the colour of the palate (*tāluraṅga*) in newborn colts, the various breeds (*kula*) of horses,⁴⁶⁵ the determination of the age of horses by means of their teeth (*vayojñāna*),⁴⁶⁶ the names and descriptions of horses with uniform or mixed colours,⁴⁶⁷ horses suitable to particular riders and especially to the king,⁴⁶⁸ the span of life (*āyurlakṣaṇa*), portents (*utpāta*) in connection with horses, the training of horses (*vahanaśikṣā*),⁴⁶⁹ the trot (*dhārā*) of horses, and rules for riding (*āroha*).⁴⁷⁰

The edition of Nakula's *Aśvaśāstra* ends with extracts from Malladevapaṇḍita's *Sārasindhu*⁴⁷¹ and another *Sārasindhu*, also called *Śālihotravaiśampāyāniya*.⁴⁷²

Authorities referred to are Garga (2, 90), Śālihotra (2, 10, 19, 21, 65, 81, 91), and Suśruta (2).⁴⁷³

Nakula's *Aśvaśāstra* is quoted in Mitramiśra's *Vīramitrodaya*.⁴⁷⁴

Nakula is quoted or referred to in Basava's *Śivatattvaratnākara*, Bhoja's *Yuktika-lpataru*,⁴⁷⁵ Dhanvantari's *Saṃnipātakalikā*,⁴⁷⁶ the *Haṃsarājānidāna*, Himmata Bahādura's *Aśvaphalaprakāśa*, the *Śārngadharapaddhati*,⁴⁷⁷ *Subhāṣitaratnanidhi*,⁴⁷⁸ *Sūktiratnahāra*,⁴⁷⁹ and Tōḍara's *Āyurvedasaukhya*.⁴⁸⁰

Nothing is known about the author of the works attributed to Nakula. The *Māhābharata* mentions the expertise of Nakula, the fourth of the Pāṇḍava brothers, in the art of training and managing horses, taught to him by Droṇa.⁴⁸¹

Medical works attributed to Nakula are: *Vaidyakaśarvasva*,⁴⁸² *Cikitsāsamgraha*, and *Sārasamgraha*.⁴⁸³ He is also credited with a *rasayoga* against *snāyukaroga*.⁴⁸⁴

Nakula's works are assigned to the period about A.D. 1000⁴⁸⁵ or are said to be earlier than A.D. 1000.⁴⁸⁶ The earliest MS of the *Aśvacikitsita* dates from A.D. 1864.⁴⁸⁷ A MS of Nakula's *Śālihotra*⁴⁸⁸ was completed in A.D. 1635/36. The earliest MS of the *Aśvaśāstra* is from A.D. 1617/18.⁴⁸⁹

NALARĀJA: *Aśvaparikṣaṇa*.⁴⁹⁰

NĀRĀDA: (1) *Aśvaśānti*;⁴⁹¹ (2) *Gajaśānti*.⁴⁹²

(2) The *Gajaśānti* is divided into nine chapters (*pāṭala*); it is written in the form of a conversation between Nārada as a teacher and Devala, also called Vāsava, as his pupil.

The chapter headings are, according to Umāpatyācāra's commentary: (1) *gajasṣṭikramakathana* (28 verses): the creation of the mythical elephants of the eight quarters of the sky⁴⁹³ and how they lost their wings, (2) *gajajātyaṃśanirūpaṇa* (105

verses): the *aṃśa* typology (sixteen *uttama*, six *madhyama* and six *adhama* types), (3) *gajaprayojanagajasthānanirūpaṇa* (23 verses): uses of elephants, places where they are found, (4) *gajabandhanasthānanirdeśakathana* (53 verses): places where elephants may be captured, (5) *gajabandhanaracanākramakathana* (73 verses): methods of capturing (the stockade, *vāribandha*, *vaśābandha* = *anugatabandha*, and *gartabandha*, i.e., the pit method), (6) *gajānayanakramahastipālalakṣaṇakramakathana* (13 verses): the removal from the stockade (*ānayaṇa*)⁴⁹⁴ and the desired characteristics in elephant keepers, (7) *gajaśālākṣaṇakathana* (27 verses): the construction of stables, (8) *gajavayaḥkāryakramakathana* (20 verses): the gestation period and a mother's care for her young during the first five months of its life, and (9) *gajaśikṣākramanirūpaṇa* (105 verses): the training of elephants, beginning when they are three years old, characteristics developing during the years of their growth, and the course of training.

Information on the author and his date is not available.

Umāpatyācāra mentions in the introductory verses of his commentary the following authorities on *gajaśāstra*: Agniveśya, Bhṛgu, Bṛhaspati,⁴⁹⁵ Gajanātha, Gautama, Kolāhala,⁴⁹⁶ Mṛgacarman, Nārada, Pālākāpya, Raibhya, Vālakhilya,⁴⁹⁷ and Vyāsa.⁴⁹⁸ Umāpatyācāra's commentary is very elaborate. Sources are not mentioned.

NĀRĀYAṆA: *Hayalīlāvati*.⁴⁹⁹

NĀRĀYAṆA DĪKṢITA: *Gaja(saṃ)grahaprapākāra*, a work on the capture and training of wild elephants in 881 *ārya* verses, arranged in five chapters (*āśvāsa*).⁵⁰⁰

Chapter one (1–29) is in praise of elephants. Chapter two (30–373) describes ten methods of capturing elephants.⁵⁰¹ Chapter three (374–423) enumerates the regions where elephants are found. Chapter four (424–664) deals with the training of elephants.⁵⁰² Chapter five (665–881) is about the construction of stables, the feeding of and care for elephants, the periodical evaluation of their worth (714–753),⁵⁰³ types of elephants according to their country of origin (*kula*) and other characteristics, auspicious and inauspicious characteristics, and the yearly show of the elephants of the king for the entertainment of the public (754–881).

The methods described for the capture of wild elephants are:⁵⁰⁴ (1) *vṛṭibandha* (capture in stockades; 30–53), (2) *vṛkṣabandha* (capture by enclosing within a smaller wooded area; 56–101),⁵⁰⁵ (3) *rajjubandha* or *śṛṅghalābandha* (capture by means of nooses or chains), also called *ālāvāla*- and *paṅkabandha* (capture through the device of water-basins or sticky mud) (102–130), (4) *vāribandha* (capture by means of a moat filled with water; 131–173), (5) *anugata*- or *kariṇibandha* (capture of young elephants by using trained female elephants as decoys; 174–203),⁵⁰⁶ (6) *laghugarta*- and (7) *nimnāvāṭabandha* (the pit method for capturing single elephants; 204–264),⁵⁰⁷ (8) *(pra)codaṇā*- or *preraṇābandha* (capture by driving; 266–300),⁵⁰⁸ (9) *vana*- or *udyānabandha* (the same as *anugatabandha*, but taking place in the city-park instead of in the woods; 301–331), (10) *pāñcālikābandha* (capture by using puppets of young elephants; 332–371).⁵⁰⁹

The editor of the text is of the opinion that methods three, four and eight form together the practice called *khedda* until recent times. Others regard the stockade method

as khedda.⁵¹⁰

No information is available on the author and the date of composition.

NĪLAKAṆṬHA: *Mātāṅgalīlā*.⁵¹¹

This treatise on elephantology consists of 253 verses,⁵¹² arranged in twelve chapters.

Chapter one (40 verses) deals with: the encounter of Romapāda, king of Aṅga,⁵¹³ with the sage Pālākāpya,⁵¹⁴ son of Sāmagāyana, who expounds to him the science of elephants; the mythical origin of elephants and their banishment to earth; the birth of Pālākāpya; the various natural types (jāti) of elephants,⁵¹⁵ the names for an elephant,⁵¹⁶ and related subjects. Chapter two (17 verses) is about favourable and chapter three (7 verses) about unfavourable marks.⁵¹⁷ Chapter four (6 verses) describes marks of longevity, and chapter five (23 verses) the stages of life.⁵¹⁸ Chapter six (13 verses) is concerned with the measurements of the various types of elephant⁵¹⁹ and with anatomy, chapter seven (3 verses) with their price, and chapter eight (25 verses) with their character types (sattva).⁵²⁰ Chapter nine (23 verses) describes the state of excitement in elephants, called must (mada), and its seven stages.⁵²¹ Chapter ten (14 verses) is about the capture of elephants,⁵²² chapter eleven (51 verses) about their keeping and their daily and seasonal regimen.⁵²³ Chapter twelve (31 verses) deals with elephant-drivers (mahouts)⁵²⁴ and related subjects.

An authority referred to is Bṛhaspati (4.4).

Gaṇapati Śāstrī, who edited Nīlakaṇṭha's treatise, says that it is very well known in Kerala, and guesses on this ground that its author may have been a native of that region.⁵²⁵

The *Mātāṅgalīlā* is regarded as a work by Nīlakaṇṭhamūssatu,⁵²⁶ who lived in the latter half of the sixteenth century and belonged to the Tirumaṅgalam house of Kerala; he studied under Brahmānanda Yati.⁵²⁷

PADMARASA: *Hayasārasamuccaya*.⁵²⁸

PĀLAKĀPYA: *Hastyāyurveda*.⁵²⁹

The *Hastyāyurveda* is a comprehensive treatise on elephant-medicine.⁵³⁰ It is composed partly in verse, partly in prose,⁵³¹ and is divided into four sections: mahārōgasthāna (eighteen chapters), kṣudrārōgasthāna (seventy-two chapters), śalyasthāna (thirty-four chapters), and uttara- or parivārasthāna (thirty-six chapters).⁵³² It is written in the form of a dialogue between Romapāda, king of Aṅga,⁵³³ who, surrounded by many sages, in his capital Campā,⁵³⁴ is instructed in the science of *hastyāyurveda* by the greatest authority on this subject, Pālākāpya. The structure of the work resembles in some respects that of the *Caraka-* and *Suśrutasaṃhitā*⁵³⁵ and is also reminiscent of Bharata's *Nāṭyaśāstra*.⁵³⁶ Each chapter opens with particular questions by Romapāda which are answered by Pālākāpya. The way in which the contents of the *Hastyāyurveda* are arranged differs from that of the classical *samhitās*. By far the larger part of the general subjects is not dealt with in the first sthāna, but in the third and fourth ones. The basic medical concepts are the same as those in human

āyurveda, but much less space is devoted to them. A nidāna-, śārīra-, and kalpasthāna are absent. The nidāna and treatment of a disease are in all cases found in one and the same chapter. The properties of medicinal substances are not enumerated, although those of articles of food are elaborately described.

Most of the subjects of the anonymous *Gajaśāstra* are either absent or much more concisely discussed. The medical science, applied to elephants and their diseases, is the major concern of the *Hastyāyurveda*.⁵³⁷

Section one is called mahārōgasthāna, which conveys the impression that the diseases it describes were considered to be the major diseases of elephants.⁵³⁸

Chapter one (vanānucarita) deals with stories about Pālākāpya, his encounter with Romapāda, and the exposition of the *hastyāyurveda* by the former to the latter. Chapter two (annasamācāra) is about the care for and feeding of elephants. Chapter three (sātmayāsātmayaviniscaya) is concerned with the fifteen causes of death in wild elephants, and with their natural food. Chapter four (śāstrasamgraha) gives a table of contents of the treatise, chapter by chapter. Chapter five (gajalakṣaṇavinyāsa) contains a eulogy of elephants and verses on the care for them. Chapter six (śiṣyopānayaṇa) is about the initiation of pupils.⁵³⁹ Chapter seven (rogavibhakti) contains interesting classifications of the diseases of elephants. Chapter eight (jvarotpatti) tells mythical stories about the origin of fever. Chapters nine to eighteen deal with a series of diseases and their treatment: jvara (fever; 9),⁵⁴⁰ skanda (10),⁵⁴¹ pāṇḍuroga (11),⁵⁴² ānāha (12),⁵⁴³ mūrkhā (13),⁵⁴⁴ śīrōroga (diseases of the head; 14),⁵⁴⁵ pādāroga (diseases of the legs; 15),⁵⁴⁶ vyāpad (disorders caused by the wrong employment of particular articles of food or medicinal preparations; 16),⁵⁴⁷ śōpha (17),⁵⁴⁸ and akṣīroga (eye diseases; 18).⁵⁴⁹

Section two is called kṣudrārōgasthāna.⁵⁵⁰ Its subjects are: vomathu (vomiting; 1), atisāra (2),⁵⁵¹ madanajagdhaka (3),⁵⁵² tṛṇaśoṣin (4),⁵⁵³ karmātinīṭha (5),⁵⁵⁴ viṣa (poisoning; 6–8),⁵⁵⁵ digdhaviddha (disorders in elephants pierced by poisoned arrows; 9), sarpadaṣṭa (snake-bites; 10), sphoṭikā (boils and bites by spiders; 11), apavādabaddha (12),⁵⁵⁶ pūrvābaddha (13),⁵⁵⁷ visarpa (14),⁵⁵⁸ hrdayasphālana (15),⁵⁵⁹ vālākṣāṇī (16),⁵⁶⁰ medhrakṣāṇī (17),⁵⁶¹ hastonmathita (18),⁵⁶² udāvarta (19), utkārṇaka (20),⁵⁶³ vātāgati (21),⁵⁶⁴ manyāgraha (22),⁵⁶⁵ madakṣīṇa (23),⁵⁶⁶ kṛśa (24),⁵⁶⁷ balakṣīṇa (25),⁵⁶⁸ śleṣmābhiṣanna (26),⁵⁶⁹ vanasātmayānulomika (27),⁵⁷⁰ talakāṣī (28–29),⁵⁷¹ galagraha (30),⁵⁷² tṛṣṇā (thirst) and siddhārthaka (31),⁵⁷³ bhūtagraha (32),⁵⁷⁴ unmāda (insanity; 33), apasmāra (epilepsy; 34), vātakuṇḍalikā (35),⁵⁷⁵ bhāronmathita (36),⁵⁷⁶ lupta (37),⁵⁷⁷ pattrakṛmi (38),⁵⁷⁸ uraḥkṣata (39),⁵⁷⁹ śonitāṇḍa (40),⁵⁸⁰ yavagaṇḍasīras (41),⁵⁸¹ carmakīla (warts; 42), vṛddha or jarā (old age; 43), avasāda (lassitude; 44), jāṭharaka (45),⁵⁸² bālacikitsā (diseases of young elephants, separated from their parents; 46), rātrikṣipta (47),⁵⁸³ mūtrasaṅga (48),⁵⁸⁴ sūtikāvāta (49),⁵⁸⁵ dantaroga (diseases of the teeth; 50), cetobhramśa (51),⁵⁸⁶ śūla (52),⁵⁸⁷ śārada (53),⁵⁸⁸ madhumakṣikādaṣṭa (stings by honeybees; 54), chavidoṣa (55),⁵⁸⁹ mṛttikābhakṣaṇa (56),⁵⁹⁰ grahaṇīdoṣa (chronic diarrhoea; 57), āma (58),⁵⁹¹ kṛmikoṣṭha (infestation of the intestinal tract by worms; 59),⁵⁹² kṣaya (60),⁵⁹³ mada (61),⁵⁹⁴ karṇavālākṛmi (parasites living in the ears and on the hairs of the tail; 62), karṇaroga (diseases of the ears; 63), abhaktacchanda (want of appetite; 64), bhaktagrāsoparodha (65),⁵⁹⁵ droṇīkaśōpha (66),⁵⁹⁶ atiyāta (67),⁵⁹⁷ gulma (swelling of the abdominal viscera; 68),

hydroga (diseases of the heart; 69), and gātraroga (70–72).⁵⁹⁸

Section three, called śalyasthāna, is mainly concerned with disorders requiring surgical treatment and with surgical procedures; it also deals with embryology and anatomy.⁵⁹⁹

Its subjects are: vṛāṇa (sores and ulcers; 1), sadyahṅsata (flesh wounds; 2–3),⁶⁰⁰ śaḍatyaya (4),⁶⁰¹ vṛāṇopākrama (5),⁶⁰² dvādaśopākrama (6),⁶⁰³ garbhasaṃbhava (embryology; 7), garbhāvakrānti (8),⁶⁰⁴ śarīravicyaya (anatomy; 9), śastrāgniprānīdhi (sharp instruments and cautery; 10),⁶⁰⁵ yantravidhi (blunt instruments; 11), śalyoddharāṇa (12),⁶⁰⁶ vidradhi (abscesses; 13), vṛāṇa (the treatment of wounds and sores; 14),⁶⁰⁷ nādivṛāṇa (fistulas and sinuses; 15), śīrāvīyūhavyadha (16),⁶⁰⁸ dantanāḍī (dental sinuses; 17), adhiḥkadanta (supernumerary teeth; 18), śīrāccheda (19),⁶⁰⁹ marmapramāṇa (20),⁶¹⁰ eraṇḍaka (21),⁶¹¹ marmavidhā (injuries to vital points; 22–23), doṣavicaya (24),⁶¹² agnidagdha (burns; 25), lūtā (26),⁶¹³ viṣakṭā (bites by poisonous insects; 27), vyāladaṣṭa (snake-bites; 28), pradeśajñāna (29),⁶¹⁴ śastravidhi (30),⁶¹⁵ kṣāra (caustics; 31), bhagna (fractures; 32), mūdhagarbha (malpositions of the foetus; 33) and dantoddharāṇa (34).⁶¹⁶

Section four, the uttarasthāna, is about the following subjects: snehapāna (the administration of oleaginous substances; 1–2), annapānavidhi (foods and drinks; 3),⁶¹⁷ snehavidhi (the procedures for the administration of oleaginous substances; 4), basti (enemas; 5), śālāvidhāna (the construction of stables; 6),⁶¹⁸ nasya (errhines; 7), yavasa (8),⁶¹⁹ ariṣṭa (signs foreboding death; 9), dantakalpanā (10),⁶²⁰ rasavīryavipāka (11), iksudāna (feeding with sugarcane; 12), nasya (errhines; 13), añjana (collyria; 14), ṛtucaryā (the regimen during the seasons; 15), kāryākāryavidhi (16),⁶²¹ anupāna (postprandial drinks; 17), sauvīrakapānavidhi (18),⁶²² surāpratīpānavidhi (19),⁶²³ gugguluvīdhi (the administration of guggulu; 20), kṣīradāna (the administration of different kinds of milk; 21), śrīgajasam̐bhava (22),⁶²⁴ kimarthaḥ (23),⁶²⁵ paricāraka (24),⁶²⁶ trividhi (25),⁶²⁷ pathyāpathyavicāra (wholesome and unwholesome substances; 26), karīṣamūtra (27),⁶²⁸ laṣunakalpa (28),⁶²⁹ lavaṇayoga (29),⁶³⁰ pāṃśudāna (30),⁶³¹ madāvasthā (31),⁶³² nāgatantukagrāha (32),⁶³³ jalahastin (33),⁶³⁴ jalaukā (leeches; 34),⁶³⁵ upasarga (35),⁶³⁶ and gajaśānti (36).⁶³⁷

The first chapter of the treatise mentions a large number of sages who assemble at the court of Romapāda in order to be instructed in the science of hastyaśyurveda. Their names are: Acūḍa, Agastya, Agniveśya, Āṅgīrasa, Arimeda, Atri, prince Bāṣkali, Bhāradvāja, Bhārgava, Bhṛgu, Bṛhaspati, Cyavana, Dīrgha,⁶³⁸ Gārgya, Gautama,⁶³⁹ Hiraṇya,⁶⁴⁰ Jamadagni, Kāṅkayana, Kāpya, Kāśyapa, Kratu,⁶⁴¹ Kumuda, Māṇḍavya, Marīci, Mataṅga,⁶⁴² Mṛgaśarman,⁶⁴³ Nārada,⁶⁴⁴ Parāśara,⁶⁴⁵ Parikara, Pulaha,⁶⁴⁶ Pulastya, Raibhya,⁶⁴⁷ Śārasvata,⁶⁴⁸ Saubala,⁶⁴⁹ Suparvaṇa, Trīṣaṅku,⁶⁵⁰ Ūrṇimālīn, Vaśiṣṭha, Viśvāmītra, and Yājñavalkya.⁶⁵¹

Some of these and their opinions are referred to in the *Hastyāyurveda*: Agniveśa (I.3.3 and IV.4),⁶⁵² Arimeda (III.8.301), Bāṣkali (III.8),⁶⁵³ Bharadvāja (IV.4), Gārgya (IV.4), Gautama (I.3.3; III.8.298; IV.4), Kāśyapa (II.8 and 11; III.8.28, 279, 295–296),⁶⁵⁴ rājaputra (= Bāṣkali; III.8.299),⁶⁵⁵ Vaśiṣṭha (II.11), and Yājñavalkya (III.8.273).⁶⁵⁶ The following sages are occasionally mentioned: Bhṛgu,⁶⁵⁷ Kāśyapa, Marīci,⁶⁵⁸ and Uddāla,⁶⁵⁹ Āṅgīrasa, Cyavana, Dīrgha, Jamadagni, Kratu, Paricara, Pulaha,

Pulastya, and Vaśiṣṭha.⁶⁶⁰ Caraka is referred to once (II.58).

Pālākāpya is quoted or referred to in the *Agnipurāṇa*, Anantakumāra's *Yogaratanasamuccaya*, Ballālasena's *Adbhutasāgara*,⁶⁶¹ Basava's *Śivatattvaratnākara*, Bhoja's *Yuktikalpataru*, the anonymous *Gajaśāstra* and *Gajavaidya*, Godāvara's *Harihara-turaṅga*,⁶⁶² Hemādri's *Caturvargacintāmaṇi*,⁶⁶³ Hemādri's *Lakṣaṇaprakāśa*,⁶⁶⁴ Jayaratna's *Jvaraparājaya*, Kṣīrasvāmin's commentary on the *Amarakoṣa*,⁶⁶⁵ Mallinātha's commentary on Kālidāsa's *Raghuvamśa*,⁶⁶⁶ Mitramiśra's *Vīramitrodaya*,⁶⁶⁷ Narahari's *Vāgbhatamaṇḍana*,⁶⁶⁸ Nilakaṇṭha's *Mātāṅgalīlā*, Niścalakara's commentary on the *Cakradatta*,⁶⁶⁹ Rāghavabhaṭṭa's commentary on Kālidāsa's *Abhijñānaśākuntala*,⁶⁷⁰ the *Śāringadharapaddhati*, Śivadāsa's commentary on the *Cakradatta*, Śrīdāsa-paṇḍita's commentary on the *Aṣṭāṅghṛdayasaṃhitā*,⁶⁷¹ Toḍara's *Āyurvedasaṃkhyā*, Ugrāditya's *Kalyāṇakāraka*,⁶⁷² Umāpati's commentary on Nārada's *Gajaśikṣā*, and Vijayaraksita's part of the *Madhukoṣa* on the *Mādhavanidāna*.

Pālākāpya's work is quoted as *Hastivaidyaka* in Cakrapāṇidatta's *Āyurvedadīpikā*, and as *Gajavaidyaka* in Vācaspati's commentary on the *Mādhavanidāna*.

A Hindi commentary on the *Hastyāyurveda*, called *Amarasubodhinī*, was written by Rākheca in the second half of the seventeenth century.⁶⁷³ A Kannaḍa commentary by Virabhadraṛāja (about A.D. 1600) is also known.⁶⁷⁴

Six types of burns (dagdha) are distinguished: agni-, arka-, vidyud-, saṃtāpa-, kṣāra-, and viṣadagdha (III.2). Wounds (sadyahṅsata) are of several types: chinna, vicchinna, nirviddha, sāvanaṣṭa, vidārīta, uttuṇḍita, atividhā, viddha, avamṛṣṭa, dagdha, and dū-ṣivīṣakṣata (III.3.4–5ab).⁶⁷⁵ Seven kinds of surgical intervention are listed: chedyā, bhedyā, lekhyā, visrāvaṇa, vidāraṇa, eṣaṇa, and sīvana (III.30).⁶⁷⁶ The names of surgical instruments are partly identical with those of the *Suśrutasaṃhitā*.⁶⁷⁷ Thirteen types of fracture are distinguished: niṣpiṣṭa, viśpiṣṭa, prakṣipta, tiryakṣipta, atikṣipta, muk-takāṇḍa, sthāpita, jarjarībhūta, cūrṇita, mathita, cyuta, majjānūjātamathita, and bhagna (III.32).⁶⁷⁸ The varieties of leeches are related to those of human medicine.⁶⁷⁹ The number of marmans is one hundred and seven, as in human āyurveda.

A discussion on the problem which part of the embryo develops first is also found in Pālākāpya's work, without, however, mentioning names of authorities who held a particular opinion on this subject.⁶⁸⁰ The stages of embryonic development are described.⁶⁸¹

The six tastes are classified into three rasas (madhura, kaṭuka, amla) and three upa-rasas (tikta, kaṣāya, lavaṇa),⁶⁸² a feature not found in human āyurveda. The seven tissues (dhātu) are connected with seven sages: rasa with Ātreya, rakta with Vaśiṣṭha, mā-mṣa with Kāśyapa, medas with Gautama, asthi with Bharadvāja, majjā with Kauśika, and śukra with Jamadagni.⁶⁸³

The eight aṅgas of āyurveda are not referred to. The arrangement of the diseases is peculiar to this treatise. They are classified, in the same way as human diseases in the *Suśrutasaṃhitā*,⁶⁸⁴ into three broad categories: ādhyātmika, ādhibhautika and ādhidivārika (I.7). The *Hastyāyurveda* enumerates seventy-six diseases by vāta (I.7.7cd–17ab), twenty-seven by pitta (7.17cd–21), thirty-two by kapha (7.22–27ab), fifteen by rakta (7.27cd–30ab), twenty-two by saṃnipāta (7.30cd–33), fourteen by vāta and pitta

(7.34–36), sixteen by vāta and kapha (7.37–40a), seven by vāta and rakta (7.40b–41c), three by kapha and rakta (7.41d–42ab), three by pitta and kapha (7.42cd–43a), three by vāta, rakta and pitta (7.43b–d), three by kapha, rakta and vāta (7.44), one by pitta, rakta and kapha (7.45ab),⁶⁸⁵ six by bhūtas and vāta (7.45cd–46), and five which are of mental origin (7.47–48ab). These 233 diseases⁶⁸⁶ form the ādhyātmika category. The category called āgantuka⁶⁸⁷ comprises eighty-three diseases (7.49–61ab), which makes the total number into 316.⁶⁸⁸

The theoretical concepts regarding pathogenesis are mostly the same as in human āyurveda, but an exception forms the recognition of blood (rakta, śonita) as having the same or almost the same status as the three doṣas;⁶⁸⁹ consequently, the term saṃnipāta, in human āyurveda applied to the group of three doṣas, is repeatedly used to designate vāta, pitta, kapha and blood.⁶⁹⁰ Vāta is very important as a cause of diseases, and the various kinds of vāta are often referred to.⁶⁹¹ The nosological classifications sometimes agree, sometimes disagree with those of human āyurveda in the descriptions of diseases common to human beings and elephants. The disease called gulma is, for example, of five types in human beings and elephants,⁶⁹² but loss of appetite is of one type in elephants,⁶⁹³ whereas human beings are afflicted by five varieties of this disorder.

Magical and religious elements, including mantras, are conspicuously present in the verses on treatment.⁶⁹⁴ Allusions to mythology are also found.⁶⁹⁵

The therapeutical procedures are largely the same as those of human āyurveda. The same applies to the materia medica. The chapter on yavasa (fodder grasses; IV.8) mentions the names of many grasses that are only found in this treatise.

Pālākāpya is a legendary figure, described as the son of the sage Sāmagāyana and a female elephant which drank the sage's urine, mixed with his semen.⁶⁹⁶ The descriptions of Pālākāpya resemble those of Ātreya Punarvasu in the *Carakasamhitā*.⁶⁹⁷ Pālākāpya is sometimes regarded as an incarnation of Dhanvantari.⁶⁹⁸ His hermitage was situated on the banks of the river Lauhitya.⁶⁹⁹

The date of the *Hastyāyurveda* cannot be determined with any certainty. The quotations by Kṣīrasvāmin prove that some version of the work is earlier than the first half of the twelfth century. The terminus ante quem would be shifted to the end of the eighth century if the Gaṅga king Śivamāra, author of a *Gajāṣṭaka*, was acquainted with the whole treatise.⁷⁰⁰ The *Hastyāyurveda* is later than the *Caraka-* and *Suśrutasaṃhitā*, because its structure betrays the influence of these classics.⁷⁰¹

PAŚUVĀIDYA.⁷⁰²

PĪLUKĀCĀRYA.⁷⁰³

RAMACANDRA KAVI: *Aśvaśāstra*.⁷⁰⁴

RUDRADEVA: *Śyainikaśāstra*.⁷⁰⁵

The seven chapters (pariccheda) of this work in verse deal with the following subjects:⁷⁰⁶ the defence of vices (vyasana) (1: karmānuṣajjana; 30 verses); the eighteen vices (2: vyasanaheyaheyatā; 33 verses);⁷⁰⁷ various kinds of hunting (mṛgayā), the last of which is hawking (śyenapātā) (3: mṛgayāvivecana; 79 verses);⁷⁰⁸ various

kinds of hawks, their training and their capacity for hawking (4: śyenavivecana; 62 verses); the feeding and tending of hawks, and the treatment of their diseases (5: cikitsā; 79 verses);⁷⁰⁹ various kinds of sport with hawks (6: śyenapāṭetikartavyatā; 62 verses); after-enjoyments (7: mṛgayānantaretikartavyatā; 29 verses).⁷¹⁰

Some of the birds mentioned in the treatise are:⁷¹¹ aurāṅgaṇa (4.42), balākākṣa (4.34),⁷¹² bharadvāja (6.41), cakrāṅga (4.35),⁷¹³ cakravāka (4.35),⁷¹⁴ caraka (4.20; 5.2; 6.39),⁷¹⁵ ceṭa (4.32; 5.7),⁷¹⁶ cūlāṅka (5.5), cūlikāṅka (4.48), dātūha (6.37),⁷¹⁷ dhāvana (4.46), dhūti (4.32; 7.12),⁷¹⁸ dhūtikā (5.7; 6.29), hamsavāja (4.37),⁷¹⁹ jūra (4.32),⁷²⁰ kālaka(vāja) (4.36),⁷²¹ kalaviṅka (4.16; 5.24, 49),⁷²² kaṅka (4.36; 6.37),⁷²³ kapota (4.16),⁷²⁴ kecuka (6.40), krauñca (6.35; 7.12), kuhī (4.3, 20, 54; 5.2; 6.24, 25, 35, 59; 7.12),⁷²⁵ lagara (4.20),⁷²⁶ lāva (6.32; 7.12), mahārāvana(vāja) (4.39–40),⁷²⁷ māṇika (4.48), pakṣakālikā (5.4),⁷²⁸ pakṣakalikā (4.21), pratiṣṭhāna (4.46), sārāsa (6.35), śaśāda (4.20; 5.3; 6.26),⁷²⁹ sicāna (4.32, 49; 5.6),⁷³⁰ śikāra (4.45; 6.57, 58), tittiri (6.58),⁷³¹ ṭonā (5.7; 6.29, 40),⁷³² tṇabarhi (7.12),⁷³³ ṭunā (4.32),⁷³⁴ turumutī (4.21; 5.7),⁷³⁵ vaharī (4.20; 5.2; 6.24, 37),⁷³⁶ vāja (4.29, 31, 32, 33; 5.24; 6.44, 48),⁷³⁷ varaja (6.44), varikā (5.48; 6.29),⁷³⁸ vāsa (4.3, 32; 5.5; 6.24, 25, 55),⁷³⁹ and vesara (4.32).⁷⁴⁰

Many words of Turkish or Persian origin are used in this work, which has been influenced by Muslim treatises on the subject.⁷⁴¹

The author, Rudra(candra)deva or Candradeva, was a king of Kūrmācala, i.e., Ku-maon. He also wrote a work on dharmaśāstra, called *Traivarnikadharmanirṇaya*.⁷⁴²

Since Rudradeva quotes Kullūkabhaṭṭa's commentary on the *Manusmṛti*, he must have lived after the middle of the fifteenth century.⁷⁴³

ŚĀLIBHADRA: *Aśvaśāstra*.⁷⁴⁴

ŚĀLIHOTRA: (1) *Aśvahṛdaya*;⁷⁴⁵ (2) *Aśvalakṣaṇaśāstra*;⁷⁴⁶ (3) *Aśvaprakāśa*;⁷⁴⁷ (4) *Aśvaśāntividhāna*;⁷⁴⁸ (5) *Aśvavaidya*;⁷⁴⁹ (6) *Aśvāyurveda*;⁷⁵⁰ (7) *Raivatatōtra*;⁷⁵¹ (8) *Śālihotra*;⁷⁵² (9) *Śālihotronnaya*;⁷⁵³ (10) *Siddhayogasamgraha*.⁷⁵⁴

The *Aśvalakṣaṇaśāstra*, *Aśvavaidya*, *Aśvāyurveda*, and *Śālihotra* may well represent the same work or different versions of it.

The title *Śālihotra* is also given to treatises on the same subject by other authors,⁷⁵⁵ since Śālihotra's work was regarded as the basic one concerning *aśvaśāstra*.⁷⁵⁶

Authors and works quoting Śālihotra or referring to him are: *Agnipurāṇa*, Ananta-kumāra's *Yogarātnasamuccaya*, the anonymous commentator on Somadeva's *Nītivā-kyāmrta*,⁷⁵⁷ Ballālasena's *Adbhutasāgara*,⁷⁵⁸ Basava's *Śivatattvaratnākara*,⁷⁵⁹ Bhānuji Dīkṣita's commentary on the *Amarakoṣa*, *Bheṣajakalpa*, *Bheṣajakalpasārasamgraha*, Bhoja's *Yuktikalpataru*, Candrāta's *Yogarātnasamuccaya*, Dāmodara's *Ārogyacintāmaṇi*, Dīpaṅkara's *Aśvavaidyaka*, Durlabhagaṇa's *Siddhopadeśasamgraha*, Garu-ḍapurāṇa, Godāvara's *Hariharacaturāṅga*, Hemādri,⁷⁶⁰ Hemādri,⁷⁶¹ Indu,⁷⁶² Induse-na's *Sārasamgraha*, Jayadatta's *Aśvavaidyaka*, Kalhaṇa's *Sārasamuccaya*, Mahābhā-rata,⁷⁶³ *Matsyapurāṇa*,⁷⁶⁴ Mitrāmīśra's *Vīramitrodaya*,⁷⁶⁵ Nakula's *Aśvacikitsita* and *Aśvaśāstra*, Narahari's *Vāgbhaṭamaṇḍana*,⁷⁶⁶ Nārāyaṇa Vidyāvinoda's commentary on the *Amarakoṣa*,⁷⁶⁷ Nīśalākara's commentary on the *Cakradatta*,⁷⁶⁸ *Pañcatantra*,⁷⁶⁹ *Paraśurāmapratāpa*, Rāyamukūṭa's commentary on the *Amarakoṣa*, *Śārngā-*

dharapaddhati, Sarvānanda's commentary on the *Amarakoṣa*,⁷⁷⁰ Śivādāsasena's commentaries on the *Carakasamhitā* and the *Cakradatta*, Sukhānanda's *Aśvaśāstra*, Ṭoḍara's *Āyurvedasaukhya*, Vāhaḍa's *Aśvāyurveda*, Vallabhagaṇi's commentary on Hemacandra's *Abhidhānacintāmaṇi*, and an anonymous *Yogaśatābhidhāna*. He is quoted as an authority on cows by Bhaṭṭotpala in his commentary on Varāhamihira's *Brhatsamhitā* (chapter 60).

The formula of Nārāyaṇa's *siddhārthakatai*, found in the Bower MS (III.36b-53), is said to derive from Śālihotra.⁷⁷¹

Śālihotra's treatise was translated into Tibetan by Śrībhadrā and Buddhaśrīśānti, assisted by the famous Rin-chen bzañ-po,⁷⁷² as well as into Persian,⁷⁷³ Arabic,⁷⁷⁴ and Hindi.⁷⁷⁵ One of the Persian translations, the *Tarjamah-i-Sālotar-i-asbān*, was translated into English by *J. Earles (1788).⁷⁷⁶

Commentaries on Śālihotra's works were written by Ananta Bhaṭṭa⁷⁷⁷ and Rāmānātha Vaidya;⁷⁷⁸ an anonymous commentary is also recorded.⁷⁷⁹

The place of residence of Śālihotra is said to have been Śālātura,⁷⁸⁰ Śālīsūrpā,⁷⁸¹ or Śrāvastī.⁷⁸² He expounded the veterinary science in the forest of Campaka at the foot of the Himālaya.⁷⁸³

Śālihotra's works⁷⁸⁴ cannot be dated accurately, but they may be from or somewhat earlier than the tenth century.⁷⁸⁵ The Tibetan translation was made between A.D. 992 and 1042.⁷⁸⁶

ŚĀLIHOTRAHAŚYA.⁷⁸⁷

ŚĀLIHOTRASĀRA.⁷⁸⁸

ŚĀLIHOTRASĀRASAMGRAHA.⁷⁸⁹

ŚĀLIHOTRASĀŚTRA.⁷⁹⁰

ŚĀLIHOTRONNAYA.⁷⁹¹

ŚĀRṆGADHARA: *Śārṇgadharapaddhati*.⁷⁹²

SĀYAṆA: *Subhāṣitasudhānidhī*. This anthology contains chapters called *Gajapaddhati* and *Aśvapaddhati*.⁷⁹³

ŚIVARĀMABHŪPATI: *Kalpanāratna*.⁷⁹⁴

SOMADEVA: *Yasastilaka*.⁷⁹⁵

SOMEŚVARA: *Mānasollāsa*.⁷⁹⁶ This work contains material of zoological interest: 4.997-1170ab (on cocks: *tāmracūḍa*- or *kukkūṭavinoda*), 1170cd-1328 (on *lāvakas*, i.e., a sort of quails: *lāvakayuddha*),⁷⁹⁷ 1239-1259 (on rams: *meṣavinoda*), 1260-1276 (on buffaloes: *maḥiṣavinoda*), 1277-1297 (on pigeons: *pārāvatavinoda*), 1298-1328 (on dogs: *sārameyavinoda*),⁷⁹⁸ 1329-1380 (on falcons and falconry: *śyenavinoda*),⁷⁹⁹ 1381-1433ab (on fishes and angling: *matsyavinoda*),⁸⁰⁰ and 1433cd-1725 (on hunting: *mṛgayavinoda*).

The section on hunting⁸⁰¹ has been reproduced, with numerous proposals for corrections of the text, and together with a German paraphrase, by R. Krottenthaler.⁸⁰²

The introductory verses describe types of country unsuitable and suitable to hunt-

ing. The remaining part is devoted to a long series of types of hunting, such as, for example, hunting at watering places (*pāṇiyajā mṛgayā*), in fields (*kṣetrajā*), by means of decoys (*dīpamṛgajā*), snares (*pāśajā*), nets (*jālajā*), cheetahs (*vyāghramokṣaṇasambhūtā*), etc.

Some of the animals mentioned are: *hariṇa*, *kṛṣṇasāra*,⁸⁰³ *kuraṅga*, *ruru*,⁸⁰⁴ *śambāra*, *sāraṅga*, and *sūkara*.

The veterinary science is also dealt with: 2.172-331 is concerned with elephants, 2.573-619 with horses, and 2.620-677 with elephants again; 4.205-661ab (*gajavāhyāvalivinoda*) and 4.661cd-827 (*vāji*- or *turagavāhyāvalivinoda*) are also about elephants and horses.

Someśvara distinguishes sixty-five breeds of horses, of which thirty-nine are mentioned by name; the names of the remaining twenty-six types are not given because they are said to have become unknown in the Kaliyuga (4.669-675).⁸⁰⁵ The *āvartas* (whirls of hair) are the same as in Nakula's *Aśvaśāstra* (4.676-678), apart from three special ones.⁸⁰⁶ Horses of more than one colour are said to be of sixteen types (4.684-701).⁸⁰⁷ The character types (*sattva*) of horses differ somewhat from those in the works of Jayadatta and Nakula (4.702-703).⁸⁰⁸ Three varieties of sheen (*chāyā*) are distinguished (4.704-705).⁸⁰⁹ Someśvara describes the line of treatment for some diseases which are peculiar to horses: *subhikṣāvarta* (2.581),⁸¹⁰ *simhāṇaka* (2.579),⁸¹¹ *rasājīrṇa* (2.603),⁸¹² and *cālī* (2.608-609).⁸¹³

Elephants of good qualities are said to be found in eight forests, named and described by Someśvara (2.172-179).⁸¹⁴ The typology of elephants is more elaborate than in other treatises (4.230-235).⁸¹⁵ Their characteristics are described on the basis of their *anūka* (size), *aṃśaka*, *sattva*, and *kula* (2.221). Seven types are distinguished as to size (2.222-225), nine with regard to *aṃśaka* (2.234-262),⁸¹⁶ three chief (*sāttvika*, *rājasa*, *tāmasa*) and nine secondary types with regard to *sattva* (2.263-272), and eight types with regard to *kula* or *anvaya* (2.274-281).⁸¹⁷ The various means of capturing (*bandha*) wild elephants (2.180-220)⁸¹⁸ and their training (*śikṣā*; 2.282-331) are dealt with by Someśvara. Causes of diseases in elephants are *bandhana* (capturing), *tāḍana* (beating), *vyādhi*, *vanasaukhyavicintana* (thinking about the pleasures of the forest), *aśātmya*, *ajīrṇa*, *āyāsa* (strain), and *jāgaraṇa* (waking) (2.628-629). Someśvara enumerates the names of fever in various living beings and inanimate substances (2.639-643).

The nosology resembles that of human *āyurveda* in being dominated by the *tridoṣa* doctrine.

A syndrome peculiar to elephants is called *mṛddodaha* (craving after mud; 2.659).⁸¹⁹

ŚRĪPURUṢA: *Gajaśāstra*.⁸²⁰

SUHOTRA: *Hayadīpa*.⁸²¹

SUKHĀNANDA: *Aśvaśāstra*.⁸²²

ŚUKRANĪTĪ.⁸²³

ŚYENACIKITSĀ.⁸²⁴

TURĀṄGAPRABANDHA.⁸²⁵

TURĀṆGARĀṆGA.⁸²⁶

VAHĀḌA, VĀHĀḌA, VAHĀḌA, VĀHĀḌA:⁸²⁷ *Aśvacikitsāsāra*,⁸²⁸ *Aśvāyurveda*,⁸²⁹ *Aśvāyurvedasārasaṅgraha*,⁸³⁰ or *Śālihotra*.⁸³¹

This work⁸³² consists of four sections (adhikāra): samunnati (chapters 1–37), on the nature of horses and their characteristics; rahasya (chapters 38–72), on the care for and the feeding of horses, and on general therapeutic measures; rasāyana (chapters 73–86), on various rasāyanas; cikitsā (chapters 87–277), on the treatment of diseases.

Section one deals with anatomy, the āvartas, puṇḍras and puṣpas, the colours of horses, their age, smell, sattva, chāyā, etc. Section two describes therapeutic measures such as sneha, sveda, abhyaṅga, dhūmapāna, nirūha, śirāvedha (bloodletting, etc.) Section three consists of a collection of kalpas. Section four enumerates more than 180 diseases, many of which cannot easily be identified.

Some noteworthy names of diseases are:⁸³³ ruṁṣāvarja (92), śṛṅgavarta (94), koradoṣa (98),⁸³⁴ snehavarta (99),⁸³⁵ vivartana (100),⁸³⁶ vartātisāra (101),⁸³⁷ ūrdhivavarta (103),⁸³⁸ viṣaṇḍhavarta (104),⁸³⁹ ādhmānavarta (105),⁸⁴⁰ siṅghanaka (106),⁸⁴¹ ekaputa (112), kaphoṣṭa (114),⁸⁴² gallaka (117), vālukī (118),⁸⁴³ āvāntaka (119), jikāstambha (120),⁸⁴⁴ saṁrambhajvara (137), abhitāpajvara (138), bodha (140), urastāpa (146), praskanna (147),⁸⁴⁵ anuskanna (148),⁸⁴⁶ liṅgita (149), vātabalā (150),⁸⁴⁷ amāṇḍaka (151),⁸⁴⁸ alūkapāda and māmsacchedalaṅgita (152),⁸⁴⁹ abhigāṭalaṅgita (153), vidārī (154),⁸⁵⁰ kaṇḍarālaṅgita (155), upajāṅghā (156),⁸⁵¹ śronīpatī (158),⁸⁵² daṁśapitta (164),⁸⁵³ koṣṭarājī (166),⁸⁵⁴ vartinī (168),⁸⁵⁵ kacchapa (169),⁸⁵⁶ ekāṅgaroga (171),⁸⁵⁷ droṇikā (172 and 173),⁸⁵⁸ vālāda (174),⁸⁵⁹ unitaroga (180),⁸⁶⁰ phalaskanna (181),⁸⁶¹ aṇḍacālī (182),⁸⁶² raktāṇḍa (183), pittāṇḍa (184), kaphāṇḍa (185),⁸⁶³ puṁcchāṇḍa (186),⁸⁶⁴ āsrupāta (191),⁸⁶⁵ utkarṇa (206), prsthastambha (207),⁸⁶⁶ kapotaniṣāda (208), mrgaroga (209), mrgajṛmbhita (210), bhārābhikhinna (212),⁸⁶⁷ yoktrābhighāta (213),⁸⁶⁸ vyānaka (214),⁸⁶⁹ nīraṇaka (215),⁸⁷⁰ vidhuragraha (216),⁸⁷¹ balamattapānamatta (217), rātrihita (219),⁸⁷² prāvāraka (220),⁸⁷³ pranunna (221),⁸⁷⁴ budbuda (223),⁸⁷⁵ paridhāvaci (226),⁸⁷⁶ sūcyandhā (227),⁸⁷⁷ nāyaprekṣi (228),⁸⁷⁸ muñja (230),⁸⁷⁹ muñjajāla (231),⁸⁸⁰ añjalikārika (233),⁸⁸¹ udakagraha (235),⁸⁸² varuṇagraha (236), gardabhaka (249), kaṇṭhaśālūka (251), uroghāta (253), vislutāṇḍa (256), rājī (259),⁸⁸³ kṣudhātāṅka (264), durmanas (265), saṁcatakī (266), ḍagraha (270), jikāstambha (271),⁸⁸⁴ possession by pūtanāsa (273), and nyāsa (274).

Vāhāḍa refers to Śālihotra.

Vāhāḍa was a son of Vikrama.⁸⁸⁵

Vāhāḍa's work is earlier than A.D. 1000 according to P.K. Gode; his conclusion is based on the fact that it does not describe the pārasika, tājika and turuṣka breeds of horses, which are mentioned as the best breeds by Jayadatta, Nakula and Someśvara.⁸⁸⁶ A.-M. Blondeau dates the work to the period A.D. 700–1000; she is convinced that Vāhāḍa's work is earlier than the Sanskrit version of Śālihotra's *Aśvāyurveda*.⁸⁸⁷

VAISAMPĀYANA: (1) *Aśvāyurvedasārasindhu*;⁸⁸⁸ (2) *Gajaśāstra*.⁸⁸⁹

The edition of Nakula's *Aśvaśāstra* contains the chapter called manahsattvavijñāna of the *Sārasindhu*, also called *Śālihotravaiśampāyaniya*.⁸⁹⁰ The *Vaiśampāyaniya*

is quoted in the anonymous *Gajaśāstra*. *Vaiśampāyana* is referred to in Basava's *Śivatattvaratnākara* (7.2.207).

VĀJIRAHASYAŚATAKA.⁸⁹¹

VĀJISYENALAKṢAṆA.⁸⁹²

VĀJISYENAPARĪKṢĀ.⁸⁹³

VĀJISYENAŚĀLIHOTRA.⁸⁹⁴

VARĀHA: *Śālihotra*.⁸⁹⁵

VARĀHAMIHIRA: *Bṛhatsaṁhitā*.⁸⁹⁶

VARDHAMĀNA: *Yogamañjarī*.⁸⁹⁷

VEDAVYĀSA: *Gajalakṣaṇacikitsā*.⁸⁹⁸

VIDYĀNĀTHA: *Anūparatnākara*.⁸⁹⁹

VĪRASOMA: *Hastivaidyaka*.⁹⁰⁰

VĪRAVIKRAMADEVA MAHĀRĀJA: *Aśvaśāstra*.⁹⁰¹

VIṢṆUDĀSA: (1) *Aśvadarpaṇa*,⁹⁰² (2) *Aśvalakṣaṇa*.⁹⁰³

VIṢṆUDHARMOTTARAPURĀṆA. Three chapters of this work deal with veterinary subjects: gocikitsāvarṇana (II.43), aśvacikitsā (II.46), and hasticikitsā (II.49).

YOGARĀJA: *Aśvaphalaprakāśa*.⁹⁰⁴

Part 10

Works on rasaśāstra and ratnaśāstra

Chapter 1 *Ānandakanda*

The *Ānandakanda*¹ is a very elaborate text on alchemy in the form of a conversation between Bhairava² and Bhairavī.³

Contents⁴

The treatise consists of about 6,900 verses, arranged in two sections (*amṛtīkaraṇaviśrānti* and *kriyākaraṇaviśrānti*), which are divided into twenty-six and ten chapters (*ullāsa*) respectively, followed by two additional chapters (*parīṣiṣṭa*).

The *amṛtīkaraṇaviśrānti* deals with the processing of mercury, the *kriyākaraṇaviśrānti* with the processing of metals, minerals, gems, etc.

The subjects of chapter one of section one (61 1/2 verses) are: introduction (1–8ab), the origin of mercury and its varieties (1.8cd–27ab), the names of mercury and their etymology (27cd–34ab), generalities on the *doṣas* of mercury (34cd–38ab), the five *avasthās* (38cd–39ab), the five *gatis* (39cd–42ab), the *doṣas* and their effects on the human system (39cd–53ab), and a ritual (53cd–62ab).

Chapter two (270 verses) deals with the teacher and his pupil (2–10ab),⁵ the *kākinī* and a substitute for her (10cd–21), the *rasaśālā* (22–37ab), rituals to be performed (37cd–199ab), a eulogy of mercury (199cd–221ab), and a *stotra* addressed to mercury (221cd–270).

Chapter three (125 verses) is about the initiation ritual (*dīkṣā*).

Chapter four (518 verses) lists the *samskāras* (1–6) and describes these operations: *svedana* (11–24ab), *mardana* (24cd–29ab), *murchā* (29cd–35ab), *utthāpana* (35cd–36), the three types of *pātana* (37–53ab), *nirodhana* (53cd–57), *niyāmana* (58–60ab), *dīpana* (60cd–65ab), *anuvāsana* (65cd–66), *cāraṇa* (69cd–170ab), *jāraṇa* (170cd–391), *garbhadruti* (392–422ab), *bāhyadruti* (422cd–435), *rañjana* or *rāga* (436–469), the three types of *sāraṇā* (470–489), *vedha* (490–509), and *krāmaṇa* (510–518).

Two types of *cāraṇa* are described, *samukha-* and *nirmukha-**cāraṇa*, four varieties of *mukhīkaraṇa* (71–96ab), and twelve ways to achieve *abhrakacāraṇa* (98–149).

Other subjects of chapter four are the preparation of *abhrakasattva* (174–187; five methods), *dvandvamelāpana* (188–243ab), *bījas* (243cd–328), *biḍas* (329–359), the *druti* of mica, gold and gems (423cd–429), *drutimelāpana* (429cd–435), *rañjanataila* (437–440), and *sāraṇataila* (480–489).

Chapter five (86 1/2 verses) is concerned with *bhūcarī jāraṇā* (2–9),⁶ *khecari jāraṇā* (10–16ab),⁷ another type of *jāraṇā* (16cd–20),⁸ *jāraṇā* again (21–33ab),⁹ the *jāraṇā* of gems (33cd–45),¹⁰ *dhūmavedhirasa* (46–52),¹¹ some methods to achieve *vedha* (53–

62),¹² grades of vedha dependent on the amount of grāsa assimilated (jīrṇa) by mercury (63–71),¹³ the properties of mercury when it has assimilated a sixfold amount of abhṛaka (72–75ab), the order in which mercury should be made to digest and assimilate other substances, the amount of grāsa to be added, the effects of the addition of each grāsa (75cd–83ab),¹⁴ and, finally, the general effects of each of the saṃskāras (83cd–87ab).

Chapter six (129½ verses) is about deavedha, i.e., the transformation of the body. Its subjects are: the preparatory purification of the body by means of pañcakarman (4–18ab), other purificatory measures (18cd–30), āroṭarasa and its uses (31–39), khotābaddharasa and the way to use it (40–85ab), dietary and behavioural rules (85cd–106ab), rasājīrṇa and its treatment (106cd–114ab), and vedha of the seven dhātus of the body (114cd–130ab).

Chapter seven (188½ verses) deals with the origin of the gems (1–5); diamonds (vajra), their varieties, characteristics and uses (6–14), their purification (15–19), vajrabhasman as a rasāyana (20–35ab), vajraudana (35cd–39), the liquefaction (druti) of diamonds (40–42ab) and other gems (42cd–44), and the properties of vajrabhasman (45–49ab); gold, its varieties, purification, bhasman, its use as a rasāyana, its liquefaction (49cd–82); kānta(loha), its origin and varieties (83–96), the extraction of its essence (sattvapātana; 97–104), its properties and purification (105–111ab), mantras to be employed (111cd–115), the preparation of the bhasman, its amṛtikaraṇa, pāka, and uses as a rasāyana (116–139ab),¹⁵ the liquefaction of kānta (139cd–140ab); the four types of iron (kiṭṭa, muṇḍa, ṭikṣṇa, kānta) and the superiority of kānta for alchemical purposes (140cd–143ab); mica (abhṛaka), its origin, four varieties, the superiority of the variety called vajra, the preparation of dhānyābhṛaka (143cd–164), the extraction of abhṛakasattva (165–168),¹⁶ the bhasman of the sattva (169–174), the uses of the sattva (175–183ab), the liquefaction of the sattva (183cd–185ab), and the properties of mica (185cd–189ab).

Chapter eight (22 verses) gives an account of rasāyana and the order in which various preparations should be used.

Chapter nine (196 verses) deals with the preparation of rasāyanas.

Chapter ten (140 verses) is about fifteen different ghuṭikās (15cd–102ab), plants and other drugs employed in krāmaṇa (1102cd–107), the effects of the pills (ghuṭikā) described (1108–140ab), and a mantra (140cd).

Chapter eleven (42 verses) describes bhūtakālāntakarasa.¹⁷

Chapter twelve (200 verses) is devoted to the mountain Śrīśaila (= Śrīparvata) and the numerous holy places there, where siddhis can be acquired; the chapter ends with mantras.

Chapter thirteen (38 verses) is concerned with sulphur (gandhaka), its origin, four varieties, purification, and uses as a rasāyana.

Chapter fourteen (47 verses) deals with poisons, their origin (12–12), varieties (13–25), purification (26–27), uses as a rasāyana (28–31), and the disorders caused by poisons, followed by the treatment of these disorders (31–47).

Chapter fifteen (634 verses) describes kalpas of thirty-eight divine herbs (divyauśadhi).

Chapter sixteen (127 verses) is about the following subjects: ankolakalpa (11–13),¹⁸ other rasāyanakalpas (14–25), mahākāmeśvarakalpa (26–33), mixtures of organic and inorganic substances (34–37), mahānīltila (38–43ab), candanādyatila (43cd–51ab), a rasāyana used in massage (udvartana; 51cd–60), kalpas used in blackening the hair (keśarañjana; 61–109ab), and rules for the digging up of divyauśadhis (109cd–127).

Chapter seventeen (94½ verses) is about the drinking of water in the early morning (uśahpāna) as a rasāyana.¹⁹

Chapter eighteen (476 verses) discusses the daily regimen (dinacaryā, 1–381; rātricaryā, 382–476), chapter nineteen (21 verses) the regimen during the seasons (1–183ab); chapter nineteen includes descriptions of the digestive process and metabolism (183cd–204); it ends with verses on the digestive fire (205–219ab).

Chapter twenty (196 verses) is devoted to jīvanmukti, the means to attain this state, and yoga.

Chapter twenty-one (110 verses) describes the construction of the hut (kuṭī) used for rasāyana, the procedure itself, and its results.

Chapter twenty-two (88 verses) describes vandāka, several kinds of this plant, and vandākakalpas.²⁰

Chapter twenty-three (749½ verses) deals with the purification (śodhana) of mercury (13–34; seven methods), vaḍavānalābhiḍa (35–43ab), the preparation of mercurial ashes (pāradabhasman; 43cd–127: thirty-one methods), the preparation of gandhapīṣṭi (129–149ab; six methods), piṣṭistambhana (149cd–154ab), piṣṭijāraṇa (154cd–158ab), piṣṭimāraṇa (158cd–164ab), bandhas of mercury (164cd–211: vaikrānta-, gandhaka-, gandhakasvarṇa-, mūlikābandha), murchanā (212–241; nine methods), kalpas resulting in the bandha of mercury (242–408: mūlikābandha), kartarīrasabandha (409–417ab), a number of udakabandhas (417cd–527ab), some ghuṭikās (527cd–557), some rasāyanakalpas (558–584ab), baddhajāraṇā (584cd–586), three types of bandha: mūla-, sāra- and pākabandha (587–593ab), drutibandha (593cd–597ab), drutimelana (597cd–599), types of vajrabandha (600–648ab), bandhas suitable to attain vedha (648cd–727ab), vajrahemaḍvādvamelāpāna (727cd–742ab), and ratnadrutibandha (742cd–750ab).

Chapter twenty-four (207 verses) is devoted to the bandha of mercury by means of mahārasas, uparasas and lohas.²¹ Its subjects are: vaikrāntabandha (22–37; ten methods), kāntabandha (38–41ab), capalabandha (41cd–54ab; three methods), gandhakabandha (54cd–95; eight methods), tālakabandha (96–102ab), several types of laghubandha (102cd–154ab), nigalabandha (154cd–178), murchā (179–189ab), and jalūkābandha (190cd–208ab).

Chapter twenty-five (114 verses) gives definitions of technical terms (paribhāṣā).²²

Chapter twenty-six (244 verses)²³ gives an account of the yantras (1–148ab), mūṣās (148cd–186ab), koṣṭhīs (210cd–214), puṭas (218cd–237), and some related subjects.

Chapter one of the kriyākaraṇaviśrānti (363 verses) is devoted to the uparasas. It begins with lists of the uparasas (4–9ab), lohas (9cd–10), ratnas (11) and uparatnas (12–13cd).

Subjects dealt with in this chapter are: gandhaka (sulphur; 13cd–47); haritāla (48–73ab); manahśilā (73cd–88); māksika (89–140); abhraka (mica; 141–180ab);²⁴ hingula (cinnabar; 180cd–190); gairika (191–194ab); capala (194cd–204ab); śilājatu (204cd–215); bhūnāga (216–228ab); haridrāśman (228cd–229ab); agnijāra (229cd–234); rasaka (235–243); mayūratuttha (244–251ab); kaṅkuṣṭha (251cd–252); girisindūra (253–254); ṭaṅkaṇa (255–257ab); kampillaka (257cd–258); vatsanābha (259–261); kāśisa (262–265); gauripāśāṇaka (266); tuvarikā (267–268); podāraśṅgi-ka²⁵ (269–270); sindūra (271–273); rasāñjana, nīlāñjana, sauvīrāñjana and sroto'ñjana (274–286); aphenā²⁶ (287–292); puṣpāñjana (293–294); śaṅkha and kṣudraśaṅkha (295–298ab); śukti (298cd–300); jalaśukti (301–302ab); kaparda (302cd–308ab); sābunī (308cd–310ab); navasāra (310cd–312ab); saurāṣṭrī (312cd–313ab); ākhu-pāśāṇa (313cd–315ab); sarjarasa (315cd–318ab); guggulu (318cd–324); yavakṣāra (325–326); sarjika (327–328ab); lavaṇakṣāra (328cd–330ab); vajrakakṣāra (330cd–332ab); sāmudralavaṇa, saindhava, kācalavaṇa, biḍa, and sauvarcala (332cd–343); amlavetasa (344–347); kāca (348); chagaṇa (349–350ab); aṅgāra (350cd–351ab); sikatā (351cd–352ab). The chapter ends with verses on the purification of the uparasas (352cd–363).

Chapter two (48½ verses) is devoted to gold, its names, varieties, purification, the preparation of its bhasman, and its properties. Silver and copper are dealt with in the same way in chapters three (33 verses) and four (60 verses).

Chapter five (81½ verses) is about iron, its origin and three types (1–6), kāntaloḥa, its names and properties (7–17ab), purification (17cd–28ab), the preparation of its bhasman (28cd–61ab; nine methods), the amṛtikaraṇa of the bhasman (61cd–66ab), lohapaḥka (66cd–68ab), the examination of the bhasman and its properties (68cd–82ab).²⁷

Chapter six (37½ verses) deals in the same way with tin (1–16ab) and lead (16cd–38ab).

Chapter seven (111½ verses) deals with pītāla (brass; 1–11ab); kāmṣya (bronze; 11cd–18ab); vartaloḥa²⁸ (18cd–24ab); alloys (24cd–28); abhrakasattva,²⁹ its four varieties (29–30ab), the extraction of abhrakasattva (30cd–34ab), the varieties called kaṭhina, mṛdu and bīja (34cd–60ab), the purification (nirmalīkaraṇa) of abhrakasattva (60cd–65), the preparation of abhrakasattvasindūra (66–86ab; four methods), sthālīpāka (86cd–89), the amṛtikaraṇa of lohābhasman (90–92), the properties of abhrakasattvasindūra (93–99); maṇḍūra (100–106ab); the quantities of a series of substances to be used in the purification and māraṇa of mercury, metals, etc. (106cd–112ab).

Chapter eight (218 verses) gives an account of the ratnas (1–166ab) and uparatnas (166cd–218). Its subjects are: māṇikya (4–15ab); muktā (15cd–21); pravāla (22–30); marakata (31–40); puṣparāga (41–46); vajra,³⁰ its names, the places where it is found, its varieties, qualities and blemishes (47–57ab), purification (57cd–66), the killing of its varieties (67–76ab) and of vajra in general (76cd–115; fourteen methods), its mṛdūkaraṇa (116–131; six methods), druti (132–136ab), and properties (136cd–139ab); nīla (139cd–149ab); gomeda (149cd–155ab); vaiḍūrya (155cd–164); the group of five ratnas and the group of nine ratnas (164cd–166ab); sūryakānta (166cd–171); candrakānta (172–174); sphaṭika (175–176ab); vaikrānta (176cd–193); rājāvarta (194–204ab);

sasyaka (204cd–208); vimala (209–217); peroja (218).

Chapter nine (110 verses) discusses in its introductory verses the herbs used in alchemical operations (the kulauṣadhis), which are to be distinguished from those useless for this purpose (the ṭṛṇauṣadhis). The kulauṣadhis are divided into four groups: rasauṣadhis, mahauṣadhis, siddhauṣadhis and divyauṣadhis (1–19ab). The divyauṣadhis belong to six groups, called vṛkṣa, vallī, latā, gulma, ṭṛṇa and vandānika (18). Chapter nine describes the sixty-four divyauṣadhis (19cd–97) and ends with an enumeration of these plants (98–111).

Chapter ten (235 verses) describes eighty-eight mahauṣadhis (1–224) and ends with an enumeration of these plants (225–235).

The two pariśiṣṭa chapters (paribhāṣā: 121 verses; prakīrṇaka: 163½ verses) consist of quotations from the *Abhidhānakāmadhenu*, *Ajīrpamañjarī*, *Devīyāmala*, *Rasadarpaṇa*, *Rasakāmadhenu*, *Rasamañjarī*, *Rasapaddhati*, *Rasaprakāśasudhākara*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasasāra*, *Rasāvatāra*, *Rasendracūḍamaṇi* and *Śaktyavātāra*.

The *Ānandakāṇḍa* is quoted in the commentary on the *Aṣṭamahāmātrā*, Guḷrā-jārmamiśra's commentary on the *Āyurvedaprakāśa* (ad 1.363), Somadevaśarman's commentary on the *Āyurvedaprakāśa*, and the *Rasatattvavivecana*.³¹

Special features³²

The five avasthās of mercury are: dhūma, citiṇī, maṇḍūkapluti, sakampa and vikampa (I.1.38cd–39ab).³³ The five gatis are: jalavadgati, dhūmagati, hamsavadgati, kiṭṭanibhā gatiḥ, and jīvavadgati (I.1.39cd–42ab).³⁴ The fourteen naisargikadoṣas are: pāṭhiva or bhauma, āpya, āgneya, ānila or vāyavya, nābhasa, gajacarmākhyā or gajatvac, puṇḍarīka, visarpa, hāridra, raktacarmākhyā, nāraṅga, raktabinduka or raktabīja, asahyāgni, and maṇḍūka (I.1.42cd–44ab).³⁵ The seven kañcukas or aupādhikadoṣas are: kālikā, malinī, kapotī, raktakañcukā, salomī, girijā, and piṅgalī (I.1.44cd–45).³⁶ The three yaugikadoṣas are: viṣa, nāga and vaṅga (I.1.46ab).³⁷ Each of the twenty-four doṣas is associated with a particular disorder (I.1.46cd–53ab).

The worship of Rasabhairava and Rasāṅkuṣī are important topics of chapter two. Numerous other deities are mentioned, among whom are the ten Dūtīs (I.2.122–123),³⁸ the eight Vidyēśvaras (I.2.127), the seven Mothers (I.2.163),³⁹ the Yoginīs,⁴⁰ Śaktis, Kubjikā (I.2.164–165), etc. Mantras are frequently mentioned. Bhūtaśuddhi is elaborately described (2.97–194ab). The verses on rasasandhyā (I.2.40–62) are peculiar to the *Ānandakāṇḍa*.⁴¹

Chapter three discusses five types of dīkṣā: samayā- (I.3.9–56), sādha- (I.3.57–70), nirvāṇa- (I.3.71–81), ācārya- (I.3.82–96), and siddhadīkṣā (I.3.97–109).⁴² The verses on the samayādīkṣā enumerate the nine Nāthas⁴³ and the sixteen Siddhas. The names of the nine Nāthas are: Ādinātha,⁴⁴ Mīnanātha,⁴⁵ Gorakṣa,⁴⁶ Koṅkaṇēśvara,⁴⁷ Jālandhreśa,⁴⁸ Kandhanīśa,⁴⁹ Oḍḍīśa, Ciñciñīśvara,⁵⁰ and Caurāṅgi⁵¹ (I.3.47–48ab). The sixteen Siddhas⁵² are: Caurāṅgi,⁵³ Carpaṇi,⁵⁴ Ghodācūli,⁵⁵ the two Rāmas,⁵⁶ Bholagovinda, Vyāḍi,⁵⁷ Nāgārjuna,⁵⁸ Korāṇḍa,⁵⁹ Śūrpakarna,⁶⁰ Muktāyī, Revāṇa,⁶¹ Kukkurapāda,⁶² Śūrpapāda, Kaṇaurika,⁶³ and Kiñkīṇika (I.3.48cd–50).

The list of the eighteen saṃskāras at the beginning of chapter four (I.4.1–6) omits grāsapramāṇa, krāmāṇa and sevā; anuvāsana is a saṃskāra; the three types of sāraṇā are regarded as three distinct saṃskāras.

Divine plants (divyamūlikā), employed in the cāraṇa of mica (abhraka) are: agnidhamanī, bṛhatī, cificikā, hamsapādī, indravāruṇī, karkoṭī, khaṇḍajārī, kumārī, lāṅgalī, maṇḍūkī, punkhā, rambhā, śaṅkhaṇḍī, sarpākṣī, vajrī, and vyāghrapādīkā (I.4.154cd–156). Four bijas are said to be important: hema-, tāra-, nāga- and vaṅgabija (I.4.250cd–254ab); a fifth type described is tāmrabija (I.4.318cd–320).

Sixteen different biḍas are described (I.4.330–359). Anusāraṇā and pratisāraṇā are described as simple repetitions (once, respectively twice) of the operation called sāraṇā (I.4.489). Types of vedha are not distinguished in chapter four.

Some purificatory measures, to be taken before the ingestion of mercurial preparations, are said to remove the lavaṇa-, kṣāra- and amladoṣa from the adept's body (I.6.18cd–23ab).⁶⁴

Diamonds and their processing are dealt with in chapter seven (I.7.1–49ab), separately from the other gems. Three types of gold are distinguished: rasavedhaja (gold made by means of transmutation), kṣetrasambhava (naturally occurring gold) and lohasaṃkaraṇa (products resembling gold) (I.7.50–52ab). Five varieties of kāntaloḥa are described: bhrāmaka, cumbaka, karṣaka, drāvaka and romaka (I.7.87–96).⁶⁵

The names of the pills (ghuṭikā) described in chapter ten⁶⁶ are: mṛtasamjīvanī, divyā, kāmēśvarī, hemaśundarī, madanaśundarī, khecarī, vajreśvarī, mahāvajreśvarī, vajrakhecarī, kālavidhvamsinī, gaganeśvarī, vajraghaṇṭeśvarī, vajrabhairavī, tripurabhairavī, and mahābhairavī.⁶⁷

Place-names, names of deities, etc., occurring in chapter twelve, are: Acaleśvara (169), Acchatailagiri (148), Alampura (75; 77), Amareśvara (170), Āvartaka (46), Bhīmapāduka (75), Bhṛgupātana (145), Brahmeśvara (68), Caṇḍikā (71), Candragupta-prākāra (150), Chedikīdvāraka (138), Dādhikavātaka (148), Dakṣiṇā (141), Devahra-da (155), Ḍoṅgalikā (190), Durgā (69), Gaṇādhīpa (123), Ghaṇṭāsiddheśvara (8; 11), Guṇḍiprabhā (159), Hastiśilā (52), Hastiśiras (52), Ileśvara (168), Īśāna (126), Kadambeśvaradeva (133), Kākalārī (192), Kālakaṇṭheśa (163), Kapoteśa (137), Kapoteśvara (141), Kokilābila (34), Koṭīśvara (168), Kṣetrapālaka (121), Kuṇḍaleśvara (48), Liṅgādri (182), Mahānanda (162), Maheśvara (80), Maṇipalli (29), a yakṣiṇī called Moha-lī (104), an elephant called Mohana (152), Nīlavani (157), Padmāvatībila (127), Paṭṭhakarnēśvara (175), Piṇḍikā (184), Puruṣeśvaradeva (49), Puṣpagiri (137), Rāmeśvara (45), Sarveśvara (189), Sparśaśilā (151), Śrīmālīnīśvara (165), Śrīmālikārjuna (8), Sureśvara (43), Svargapurīnātha (39), Svārṣaśilā (170), Tambūpura (161), Tripurānta-ka (22), Umāparvata (165), Vajreśvara (43), and Yogīśvarī (77).⁶⁸

Chapter fourteen describes ten poisonous substances of vegetable origin that are unsuitable for rasāyana purposes: kālakuṭa, dardura, hālāhala, meṣaśṛṅga, mohada, granthī, karkāṭa, raktaśṛṅgi, haridra, and kesara (I.14.13–14); the eight suitable poisons are: śvetaśṛṅgi, vatsanābha, sarṣapa, śṛṅgi, vāluka, mustaka, saktuka, and kardama (I.14.15–16ab). The eight stages (vega) of intoxication are dealt with (I.14.33–35ab).

The kalpas described in chapter fifteen are called after the following thirty-eight divyauṣadhis: brahmavṛkṣa (3cd–51),⁶⁹ śvetabrahmavṛkṣa (52–60ab),⁷⁰ muṇḍī

(60cd–70ab),⁷¹ devadālī (70cd–91),⁷² śvetārka (92–97ab),⁷³ hastikarṇī (palāśa) (97cd–101),⁷⁴ rudantī (102–111ab),⁷⁵ nirguṇḍī (111cd–130),⁷⁶ śunakaśālmālī (131–138ab),⁷⁷ pathyā (138cd–156ab),⁷⁸ āmalakī (156cd–162ab),⁷⁹ triphalā (162cd–177ab),⁸⁰ śuṇṭhī (177cd–181), pippalī (182–191ab),⁸¹ citraka (191cd–201),⁸² bhallātakī (202–205ab), bhūmikadamba (205cd–209ab),⁸³ punarnavā (209cd–218),⁸⁴ bhṛṅgarāja (219–227),⁸⁵ kumārī (228–245ab), mahānīlī (245cd–253ab),⁸⁶ musalī (253cd–257),⁸⁷ indravallī (258–263ab), jyotirdrūma (263cd–264), aśvagandhā (265–266ab),⁸⁸ jyotiṣmatī (266cd–304),⁸⁹ guggulu (305–312),⁹⁰ vijayā (313–499),⁹¹ kañcukī (500–510), kukkuṭī (511–522ab), somalatā (522cd–579ab),⁹² guḍīcī (579cd–587), tuvaraka (588–596),⁹³ somarājī (597–599ab),⁹⁴ vṛddhadārūka (599cd–620), vajravallī (621–623ab),⁹⁵ tilakṣīrīṇikā (623cd–627), and brāhmī (628–634).

The elaborate description of uṣaḥpāna in chapter seventeen is a remarkable feature of the *Ānandakanda*; the sniffing up of water through the nose (nāsāpāna) is also dealt with (I.17.93cd–95ab).

Chapter twenty describes the ten main nāḍīs (62–64) and the ten kinds of vāyu (65–69), Kuṇḍalinī (73–82ab), mudrās and bandhās (82cd–108ab), together with other subjects known from Tantric works and treatises on Yoga.

The construction of the hut (kuṭī) for rasāyana purposes is a distinctive feature of the *Ānandakanda*, not found in other rasaśāstra texts.

Chapter twenty-two describes a long series of varieties of vandāka or badhnaka, growing on about fifty different plants and trees.⁹⁶

The mūlikābandhas of chapter twenty-three are concerned with the following plants and substances: niśācara (244–260),⁹⁷ aṅganāyikā (261–269ab),⁹⁸ nara-sāra (269cd–286ab),⁹⁹ kaṅkālakhēcārī (286cd–289ab),¹⁰⁰ mantrasimhāsani (289cd–295ab),¹⁰¹ irindarī (295cd–310ab),¹⁰² kṣmāpāla (315–316ab),¹⁰³ tṛṇajyotiṣ (338–341ab),¹⁰⁴ uccaṭā (341cd–346),¹⁰⁵ raktasnuhī (347–348),¹⁰⁶ sthalapadminī (349–355),¹⁰⁷ citraka (356–365ab),¹⁰⁸ jyotiṣmatītaila (365cd–370),¹⁰⁹ dagdharuhā (371–377ab),¹¹⁰ kaṭutumbī (377cd–380ab),¹¹¹ lohadaṇḍa (380cd–386),¹¹² kṣīrakanda (387–392ab),¹¹³ śākavṛkṣa (392cd–398),¹¹⁴ devadālī (399–402),¹¹⁵ śvetaguṇjā (403–408),¹¹⁶ and kartarīrasa (409–417ab).¹¹⁷

The udakabandhas of chapter twenty-three describe candrodakabandha (417cd–428ab),¹¹⁸ viṣodakabandha (428cd–446ab),¹¹⁹ samjīvanījalakalpa (446cd–466),¹²⁰ uṣnodakakalpa (467–480ab),¹²¹ and śailodakakalpa (480cd–527ab).¹²²

The ghuṭikās which follow (23.527cd–557) are prepared with śailodaka,¹²³ the rasāyanakalpas (23.558–584ab) with rasabhasman.¹²⁴ The verses on bandha and related subjects (23.584cd–790ab)¹²⁵ mention several types of this process.¹²⁶

Chapter twenty-four describes four types of jalūkābandha: mardana-, manma tha-, kandarpa-, and madanajalūkā (24.190cd–208ab). The operations called svedana and samnyāsa, described at the end of chapter twenty-five (25.112cd–115ab), are varieties of niyamana.¹²⁷

Chapter twenty-six describes the yantras according to the *Rasendracūḍāmaṇi*.¹²⁸ Yantras added are: pātālayantra (91cd–93ab),¹²⁹ dīpikāyantra (93cd–94ab),¹³⁰ ga-ṅgāsāgara- or bhaṭṭīyantra (94cd–99), koṣṭhīyantra (101cd–102),¹³¹ garbhayantra (103–106),¹³² hamsapākayantra (107–108),¹³³ mūṣāyantra (109–111),¹³⁴ stanayantra

(112–113), nāgamāyūrayantra (114–117), cakrayantra (118–120ab), khecarayantra (120cd–123), kṛpāliyantra (124–125ab), vālukāyantra (125cd–128),¹³⁵ lavaṇayantra (129–130),¹³⁶ bhūdhāyantra (131),¹³⁷ nālikāyantra (132–134ab),¹³⁸ puṭayantra (134cd–135ab),¹³⁹ pātālayantra (135cd–139ab),¹⁴⁰ dhūpayantra (139cd–141ab),¹⁴¹ and adhaḥpātālayantra (141cd–144ab and 144cd–148ab).¹⁴²

The mūṣās are described according to the *Rasendracūdāmaṇi*.¹⁴³ Mūṣās added are a second type of vajramūṣā (179–180),¹⁴⁴ the prakāśa- and andhamūṣā (181–184ab),¹⁴⁵ bhasmamūṣā (184cd–185ab),¹⁴⁶ and a third type of vajramūṣā (185cd–186ab).¹⁴⁷

The description of the koṣṭhis (26.201cd–218ab) has been borrowed from the *Rasendracūdāmaṇi*.¹⁴⁸ The same applies to the puṭas (26.218cd–237).¹⁴⁹

Verses on vessels and types of fuel are added. Synonyms of the vessel called kūpikā are rūpikā, siddhā, gola and karaṇḍaka (26.238).¹⁵⁰ Synonyms of the vessel called caṣaka are kaṭhorī, cāṭikā, khorikā, kañcolī and grāhikā (26.239).¹⁵¹

The list of uparasas of chapter one of the kriyākaraṇaviśrānti is longer than in any other text; items found in this list, but not described in chapter one, are cīnakṣāra, lākṣā and gorocanā (1.7cd–8). The metals (loha) are twelve in number: gold, silver, copper, kānta, abhrasattva, tīkṣṇa, muṇḍaka, lead, tin, rīti (= pittala), kāmṣya, and vartaka (1.9cd–10).¹⁵² The list of the nine gems (ratna) presents the usual series (1.11). The nine uparatnas consist of sūryakānta, candrakānta, tārakānta, kāntaka,¹⁵³ vaikrānta, nṛpāvarta (= rājāvarta), sasyaka, vimalā, and peroja (1.12–13ab).¹⁵⁴

Godantī is a synonym of haritāla (1.48). Hīṅgula is of three varieties: carmāra, śukatuṇḍaka and hamsapāda (1.181cd–182ab). Gairika is of two kinds: svarṇagairika and pāṣāṇagairika (1.191–192ab). Ten varieties of capala are mentioned (1.195–196ab), two varieties of śilājatu: gomūtra- and karpūraśilājatu (1.205). Synonyms of haridrāśman¹⁵⁵ are niśāgrāva, pītāṅga and pītagharṣaṇa (1.128cd). Two varieties of kaṅkuṣṭha are distinguished: hema- and tārakāṅkuṣṭha (1.252ab). Kāsisa is of three types: kāsisa, puṣpakāsisa and hīrakāsisa; some authorities mention four varieties: yellow, black, white and red (1.263–264ab). Four kinds of aphena¹⁵⁶ are described: white or jāraṇa, black or māraṇa, yellow or dhāraṇa, and karbura or sāraṇa (1.289–290).

A noteworthy feature is the description of sābuṇi and the enumeration of its synonyms (1.308cd–309ab),¹⁵⁷ as well as the description of ākhupāṣāṇa (1.313cd–315ab).¹⁵⁸ Sarjarasa or rāla is said to be of five varieties: red, yellow, black, white, and multicoloured (1.316–317). Five varieties of guggulu are mentioned: mahiṣākṣa, nīlaka, padma, kumuda, and suvarṇa (1.320cd–321ab).¹⁵⁹ Noteworthy among the kṣāras are lavaṇakṣāra or loṇāra (1.328cd–330ab)¹⁶⁰ and vajrakakṣāra (1.330cd–332ab). Amlavetasa, which has many synonyms, is of two kinds: śaṅkhadrāvin and māṃsadrāvin (1.344–347).

Chapter seven of the kriyākaraṇaviśrānti mentions four types of abhrakasattva: kaṭhina, mṛdula, druti and bīja (7.29–30ab). The preparation of the kaṭhina, mṛdu and bīja types is described (7.30cd–60ab); the preparation of the druti type is absent.¹⁶¹ The same chapter gives an account of the preparation of abhrakasattvasindūra, which is red in colour (7.66–86ab).

The red ruby (māṇikya), found in Sindhala, is called padmarāga; the yellow variety, called kuruvinda, occurs in Kālapura; the saugandhika, coloured like an aśoka shoot, is found in Āndhra; the nīlagandhi, of a blue hue, occurs in Tumburu¹⁶² (8.10–11). Diamonds of particular colours are found in Pauṇḍra,¹⁶³ on the Mataṅgagiri,¹⁶⁴ in the Himālaya, in Saurāstra, Supāra,¹⁶⁵ Kosala, Kāliṅga, and on the banks of the river Peṇṇā¹⁶⁶ (8.49–54ab).¹⁶⁷ Eight varieties of vaikrānta are mentioned (8.177cd–178ab). Garuḍodgāra, usually one of the names of the emerald, is used as a synonym of sasyaka (8.204cd). Synonyms of peroja are harinmaṇi¹⁶⁸ and haritāśman (8.218).

The sixty-four¹⁶⁹ divyauśadhis described in chapter nine are: somavallī,¹⁷⁰ somavṛkṣa,¹⁷¹ sthalapadmini,¹⁷² gonasā,¹⁷³ uccaṭā,¹⁷⁴ tīsvārī,¹⁷⁵ bhūtakeśī,¹⁷⁶ kṛṣṇalātā,¹⁷⁷ laṣunavallī,¹⁷⁸ rudantī,¹⁷⁹ vārāhī,¹⁸⁰ saptapatrī,¹⁸¹ nāgini,¹⁸² sarpiṇī,¹⁸³ chattriṇī,¹⁸⁴ goṣṛṅgī,¹⁸⁵ jyotirlātā,¹⁸⁶ raktavallī,¹⁸⁷ patravallī,¹⁸⁸ kākini,¹⁸⁹ cāṇḍālī,¹⁹⁰ tāmravallikā,¹⁹¹ pītavallikā,¹⁹² vijayā,¹⁹³ mahauśadhi,¹⁹⁴ devadālī,¹⁹⁵ mraṅkṣaṇagandhinī or navanītakagandhī,¹⁹⁶ gāruḍavallī,¹⁹⁷ tumbinī,¹⁹⁸ bhūtumbinī,¹⁹⁹ gandharvā, vyāghrapādī, mahauśadhi,²⁰⁰ gomārī,²⁰¹ triśūlī,²⁰² rutasivallikā,²⁰³ tridaṇḍī, bhrṅgavallī, camarikā, karavīralātā, vajravallī,²⁰⁴ vāravallī,²⁰⁵ rohiṇī, bilvinī, gorocanalātā,²⁰⁶ akṣarā,²⁰⁷ apatrā,²⁰⁸ kuṭajavallī, mūlakandā, brāhmaṇī, munivallī or ghr̥tagandhā, nimbakālātā, tilakandā, atasivallikā, bodhilātā, madyagandhā, kūrmalātā, mādharvī, viśālā, mahānāgā, maṇḍūkālātikā, udumbaralātā, and citravallī.²⁰⁹

Chapter ten describes the following eighty-eight mahauśadhis:²¹⁰ himajā or yavaciñcā, kāravī, kaṭutumbī, jyotiṣmatī, līṅginī or tīsvārī, pātālagaruḍī, girikarṇī, ākhukarṇī, vārāhī, devadālī,²¹¹ aindrī (= indravāruṇī),²¹² gojihvā, kakatuṇḍī, raktapādī, punarnavā,²¹³ atyāmlaparnī, kartoṭakī, śarapūṅkhā,²¹⁴ bhr̥ṅgarāja,²¹⁵ guḍūci,²¹⁶ mūrvā,²¹⁷ śaṅkhaṇḍī, kākajāṅghā, śatāvārī,²¹⁸ gokṣura, kākamācī, ādityabhaktā, nākuṭī,²¹⁹ kṣīrakandā,²²⁰ sinduvāra,²²¹ aranyakārpāsī, kokilākṣa, br̥hatī, kaṇṭakārī, guṇjā,²²² vṛddhadāruka,²²³ bākucī,²²⁴ apāmārga, prapunnāta (= cakramarda), viṣamuṣṭī, kāṇḍīra, hastikanda, samudraśoṣī, gorakṣadugdhī,²²⁵ bhūpātālī, medā, mahāmedā, kākoli, kṣīrakākolī, vṛddhi, ṛddhi, jīvaka, ṛṣabha, ādityaputra, hastikarṇī,²²⁶ kapikacchū, karṇasphoṭā, rudrajatā, nīlikā, koṣātakī, jīvanī,²²⁷ jatukā, muṇḍī,²²⁸ viṣṇukrāntā, kumārī,²²⁹ bhūmyāmalī, barhicūḍā (= mayūśāikhā), brāhmī,²³⁰ taṇḍulīya, pāṣāṇabhedana, hastiśuṇḍī, kṣudrāmlīkā, brahmadāṇḍī, tālī, ākāśavallī, sahadēvī, lakṣmaṇā, bhūkadamba,²³¹ tailakanda, viṣṇukanda, trikarnikā, nāgadantī, droṇapūṣpī,²³² amṛtasravā, putradātṛī, śālmālīkanda, āvartakī, and amlapatrī.

The list at the end of the chapter adds hamsapādī (10.234).

The author

The author of the *Ānandakanda* is unknown.²³³ Some are of the opinion that it was composed by a follower of the Bhairava cult, because the treatise is said to have been expounded by Bhairava.²³⁴ Others suppose the author to have been a resident of Śrī-śaila, since this mountain and many sacred places in its vicinity are referred to in the *Ānandakanda*.²³⁵

Date

The fact that the *Ānandakanda* contains material that is also found in the *Rasārṇava* and *Rasendracūḍāmaṇi*, two works which are original compositions of their authors, implies that it is probably posterior to the twelfth or thirteenth century.²³² The references to Gorakṣa and Mīnānātha are in agreement with this upper limit. The same applies to the employment of the term gañjā in the vijayākalpa.²³³ The resemblances between parts of the *Ānandakanda* and Nityanātha's *Rasaratnākara* are unsuitable to chronological purposes since the latter work is based on earlier sources.²³⁴

Chapter 2

Āyurvedaparakāśa

The *Āyurvedaparakāśa* by Mādhava¹ is a comprehensive treatise on alchemy in the service of medicine.

Contents

The work consists of about 1,800 verses, mixed with prose,² arranged in six chapters (adhyāya).

Chapter one (sūtasādhanaḍhyāya; 597 verses and prose passages) deals with the following subjects, after paying homage to Śiva, Śivā and Heramba (1–2) and a number of verses introducing the subject of the treatise (3–15): the doṣas of mercury (16–22ab); the necessity of its purification (22cd–25ab); the quantity of mercury one should employ in the purificatory processes (25cd–27ab); the ritual to be performed before starting the work (27cd–30ab); the mortar (khalva) and pestle (mardaka) (30cd–31); opinions on the number of the saṃskāras (32); a list of eighteen saṃskāras: svedana, mardana, mūrchana, utthiti, patana, rodha, niyāmana, saṃdīpana, gaganabhakṣaṇamāna, saṃcāraṇa, garbhagatā drutiḥ, bāhyā drutiḥ, jāraṇā, rāga, sāraṇa, saṃkrāmaṇa, vedha, and śarīrayoga (33–34); the first eight saṃskāras, to which the author restricts himself (35); a list of nineteen saṃskāras, i.e., the previous list, to which anuvāsana has been added (36); svedana (37–48); mardana (49–54ab); mūrchana (54cd–62); utthāpana (= utthiti) (63–67); pātana (68–85); bodhana (= rodha; 86–94); niyāmana (95–100); saṃdīpana (101–103); anuvāsana (103–104); jāraṇa of sulphur, gold, mica and the essence of mica, together with many related subjects (107–251);³ garbhadruti and related subjects (252–306);⁴ bāhyadruti (307); sāraṇa (308–311); krāmaṇa (312); rañjana (313–318); vedha (319–326) and related subjects (327–350: rājavatī vidyā and hemavatī vidyā); bandha (351–390); mūrchana (391–396); the reduction to ashes (bhasmīkaraṇa) of mercury, followed by the preparation of rasasindūra and rasakarpūra (397–435); the killing (māraṇa) of mercury (436–463); jalaūkābandha (464–469ab); the preparation of the pill called khecarī guṇikā (469cd–480); sevana (the consumption of the mercurial product and the rules to be observed; 481–555), and finally, a number of rasayogas (556–597).

Chapter two (uparasasādhanaḍhyāya; 351 verses and passages in prose) is concerned with the uparasas, called thus because some of their properties are similar to those of mercury (rasa). The group consists of gandha (sulphur), hiṅgula (cinnabar), abhra (mica), tālaka, (manah)śilā, sroto'ñjana, ṭaṅkaṇa, rājāvartaka, cumbaka, sphaṭikā, śaṅkha, khaṭī, gairika, kāsisa, rasaka, kaparda, sikatā, bola, kaṅkuṣṭhaka,

and saurāṣṭrī (1–2ab).

The subjects of this chapter are: sulphur, its mythical origin, names, varieties, properties, purification, etc. (2cd–69ab); hiṅgula, its names, varieties, properties, purification, killing, etc. (69cd–86); the names, properties, etc., of girisindūra (87), abhraka (88–172), haritāla (173–212), manahṣilā (213–224), sroto'ñjana and other varieties of añjana (225–242), taṅkaṇa (243–246), rājāvarta (247–252), cumbaka (= kāntaloha) (253–255), sphaṭikā (256–258), śaṅkha (259–263), khaṭikā (264–267), gairika (268–272), kāsisa (273–275), rasaka (276–293), kapardikā (294–302), sikatā (303–305), bola (306–311), kaṅkuṣṭha (312–319), saurāṣṭrī (320–321), abdhipeṇa (= samudraphena) (322–324ab), kṣudraśaṅkha (324cd–325), śukti and jalaśukti (326–330), mṛtikā (331), paṅka (332) and kampilla (333–335), gaurīpāṣāṇaka (336–337) and navasāra (338–340), agnijāra and girisindūra (341–342), and bodāraśṛṅga (2.343–344).

Kampilla, capala, gaurīpāṣāṇa, navasāra (= navasāra), vahnijāra (= agnijāra) and (giri)sindūra constitute the group of the sādhanārasas (345). A list of the uparasas that differs from the one found at the beginning of the chapter follows. This list enumerates gandhaka, vajra (= vajrabhṛa), vaikrānta, sindūra, bola, gairika, samudraphena, the two kinds of khaṭikā, śambūka (= jalaśukti), tārkṣya (= rasāñjana), kāsisa, kāntapāṣāṇa (= kāntaloha), varāṭī (= kapardikā), śukti, hiṅgula, kaṅkuṣṭha, śaṅkha, bhūnāga, taṅkaṇa, and śilājatu (347–349).

A disagreeing view on the rasas and uparasas is quoted; the eight rasas are, according to this authority: abhra, vaikrānta, māṅṣika, vimala, adrija (= śilājatu), sasyaka, capala, and rasaka; the eight uparasas are: gandhāśman (= gandhaka), gairikā, kākṣī (= saurāṣṭrī), kāsisa, āla (= haritāla), (manah)ṣilā, añjana, and kaṅkuṣṭha (350–351).

Chapter three (dhātusādhanādhyāya; 296 verses and passages in prose) deals with the seven metals (dhātu): gold, silver, copper, tin, zinc, lead and iron (1). The subjects discussed are: the etymology of the term dhātu (2); the connections between a series of nine metals and the nine grahas (3–4ab); a list of seven upadhātus: tāpya (= māṅṣika), vimalā, tuttha, kāmśya, pittalaka, sindūra, and śailaniryāsa (= śilājatu) (4cd–6ab); gold, its origin, varieties, properties, purification, uses, killing, etc. (6cd–78); the origin, varieties, properties, killing, etc., of silver (79–109), copper (110–147), tin (148–180), zinc (181–183), lead (184–203), iron (204–284ab), and maṇḍūra (284cd–293).

Chapter four (upadhātukādhyāya; 140 verses and passages in prose) discusses the upadhātus. Its subjects are: svarṇamāṅṣika, its names, varieties, properties, purification, and the extraction of the essence (1–17); the names, varieties, properties, purification, etc., of tāramāṅṣika (18–24), vimalā (25–33), tuttha (34–44), bhūnāga (45–55), kāmśya and pittala (56–81), the alloy called pañcaloha (82–86), sindūra (87–92), and śilājatu (93–136ab).

An additional upadhātu discussed in this chapter is capala; its varieties, properties and purification are described (136cd–140).

Chapter five (ratnaparatnasādhanādhyāya; 184 verses and some passages in prose) describes the precious (ratna) and semi-precious (uparatna) stones. The subjects of this chapter are: generalities about gems (1–3); the names of the nine major gems according to the *Rasapaddhati* and *Viṣṇudharmottara*(*purāṇa*) (4–6ab); the names of a num-

ber of minor gems (6cd–8); names of the major gems again (9–13); diamonds (vajra), their origin, varieties, blemishes, characteristics and properties, their sizes and value, their assessment and examination (14–50); pearls (mauktika), their origin, varieties, characteristics and properties (51–66); the properties of diamonds, their purification and killing (67–88); the characteristics and properties of coral (pravāla) (89–93), pearls (94–99), rubies (māṅikya) (100–104), emeralds (marakata) (105–108), vaidūrya (109–114), gomedā (115–119), sapphires (nīla) (120–125), and puṣparāga (126–130); generalities on the gems (131–132); the five most excellent gems (pañcaratna): puṣparāga, mahānīla, padmarāga (ruby), vajra and marakata (133); the eight gems which are called maṇi: vaikrānta, sūryakānta, hīraka (diamond), mauktika, maṇi, candrakānta, rājāvarta, and garuḍodgāraka (emerald) (134); the stones related to sphaṭika: gomedā, tārkṣya (emerald), vāyaja (= vaidūrya), devejyamaṇi (= puṣparāga), indu (= candrakānta), and tarāṇika (= sūryakānta) (135); the names and properties of sphaṭika (136–138), sūryakānta (139–141), candrakānta (142–144), rājāvarta (145–147), and peroja (148–149); the purification and killing of the ratnas and uparatnas (550–154); some generalities on gems (155–159); vaikrānta, its origin, varieties, properties, purification, killing, the extraction of its essence (155–174ab); some generalities on the uparatnas (174cd–176); the connections between the gems and the quarters of the sky, followed by their connections with the grahas (177–178); the liquefaction of gems (179–180); the extraction of the essence from saurāṣṭrī (181–182ab) and sasyaka (182cd–184).

Chapter six (viṣopaviṣādisādhanaādhyāya; 125 verses and some prose passages) deals with poisonous substances. Its subjects are: the origin of poisons (1–9ab); the names of poison, the eight saumya and ten ugra poisons deriving from bulbous and tuberous plants (9–10); the eight poisonous substances used in medicine (saumya), their characteristics and properties (11–19); the ten poisonous substances not to be employed in medicine (ugra) and their characteristics (20–34ab); the nine vegetable poisons distinguished by some authorities and the localities where they are found (34cd–40);⁵ the colours of the four groups of poisons: brāhmaṇa, kṣatriya, vaiśya and śūdra (41–42); the properties of the poisons (43–47ab), their purification (47cd–61) and employment in medicine (62–79); the symptoms of poisoning and its eight stages (80–86); the treatment of poisoning and the mantras to be employed (87–107); the minor poisons (upaviṣa), seven or nine in number (108–111);⁶ the purification of some upaviṣas: lāṅgalī, guṇjā, viṣamuṣṭi, jepāla, dhūrtabīja, ahiphena and bhaṅgā (112–116); the preparation of viṣatāila (117–118); the formula of viṣavajrapātara (119–120) and lavaṇabhedisudhānidhirasa (121–122), to be used as antidotes; the preparation of two alkaline fluids (kṣāra) (123–125).

The *Pākāvalī*,⁷ which forms part of the *Āyurvedaprakāśa* according to the colophons of some of its MSS,⁸ is absent from edition c. It is said to deal with mercurial and mineral preparations, and with various decoctions.⁹ One of the MSS begins with the recipe called brhatpūgapāka;¹⁰ two MSS end with the formula of mahākāmeśvaramodaka.¹¹ The *Rasayogasāgara* quotes a number of recipes from Mādhava's *Pākāvalī*.¹²

The *Āyurvedaprakāśa* is quoted or referred to in the *Āyurvedīya Khanijavijñāna*, Gulrājśarmamiśra's *Viśikhānupraveśavijñāna*, Hazārīlāl Sukul's commentary on the

Rasaratnasamuccaya, the *Rasadhātuprakāśa*, *Rasakāmadhenu*, *Rasatattvavivecana*, *bhasmapīṣṭiprakaṛaṇa* of the *Rasodhāraṇa*, and *Yādavjī Trikamajī's Rasāmṛta* and *Siddhayogasamgraha*.

The author is quoted as *Āyurvedaprakāśakāra* and *Rasamādhava* in Haridattaśāstrin's commentary on the *Rasatarāṅgiṇī*, as *Āyurvedaprakāśakṛt* in the commentary on the *Āyurvedādbhīṣāra*, as *Mādhava* in the *Bṛhadyogatarāṅgiṇī* and *Āśubodha* and *Nityabodha* Senagupta's commentary on the *Rasaratnasamuccaya*, and as *Mādhavācārya* in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Sources mentioned in the text of the *Āyurvedaprakāśa* are: *Bhāluki* (4.57–58), *Bhāskara* (1.96–100), *Bhāvaprakāśa* (prose between 2.192 and 193), *Govindapādāḥ* (2.132), *Nāgārjuna* (2.281), *Nityanātha* (2.164), *pāścātyāḥ* (2.242), *Rasahrdaya* (1.281),¹³ *Rasapaddhati* (prose between 4.24 and 25), *Rasaratnākara* (prose between 1.65 and 66), *Rasārṇava* (1.127),¹⁴ *Siddhamata* (1.299), and *Trivikrama* (1.186).¹⁵

Sources mentioned in the Sanskrit commentary of Guṇrājśarmamiśra are: *Agniveśa* (4.110–115), *Ātreya* (1.538),¹⁶ *Bhāluki* (4.58), *Bhāvaprakāśa* (2.188cd–192),¹⁷ *Gaurīmata* (5.162), *Govindapādāḥ* (1.262), *Hārta* (1.538; 4.107), *Laghuyogatarāṅgiṇī* (2.193–203), *Maheśvara* (1.108–112),¹⁸ *Nityanātha* (1.106, 391–394, 485–489ab), *Rājanighaṇṭu* (2.240 and 334–335), *Rasacintāmaṇi* (1.105, 330–334, 428cd–435, 469cd–480),¹⁹ *Rasamañjarī* (2.112),²⁰ *Rasapaddhati* (1.35; 2.78–82, 133–135ab, 211; 3.30, 89–90, 135, 160, 198–199, 202, 255; 4.31–33, 56–57, 131, 133, 136–137; 5.4 and 23–24),²¹ *Rasarājyalakṣmī* (1.150 and 398), *Rasaratnākara* (1.106, 153–160ab, 198, 209cd–213), *Rasaratnasamuccaya* (5.67–69ab),²² *Rasavāgbhaṭa* (1.523–525), *Śārṅgadhara* (1.174–179 and 205cd–209ab),²³ *Siddhalakṣmīśvaratantra* (1.229–230ab), *Siddhamata* (2.209), *Śiva* (1.499),²⁴ *Śivāgama* (1.118–121ab and 181),²⁵ *Vāgbhaṭa* (1.65; 2.25, 75, 123–124ab, 285; 3.31–32; 4.108–109; 6.80–85),²⁶ *Vārttikakṛt* (2.115), *Viṣṇudharmottara* (5.5–6ab), and *Yogatarāṅgiṇī* (6.54cd–56).²⁷

Additional authorities mentioned by P.K. Gode²⁸ are: *dākṣiṇātyāḥ*, *Rāmarāja*, and *Vṛddhavāsiṣṭha*.²⁹

The number of borrowings from earlier works is much larger than indicated in ed. d.

The Sanskrit and Hindī commentaries of Somadevaśarman on chapter one give almost all the sources of this part of the *Āyurvedaprakāśa*.³⁰ *Mādhava* appears to be heavily indebted to the author of the *Rasendracintāmaṇi*, from which work he borrowed extensively.³¹

Other sources, mentioned by Somadevaśarman and absent from Guṇrājśarmamiśra's commentary, are:³² *Rasapaddhatiṭīkā* (1.191), *Rasaratnadīpikā* (1.351–355), *Rasaratnapradīpa* (1.401–403), *Rasaratnapradīpikā* (1.139), *Rasasamketakalikā* (1.182, 203–205ab, 363–365, 455, 497), and *Rasendracūdāmaṇi* (1.57–60).

Special features

The author declares that the contents of his treatise are based on the words of his teacher and his own experience (1.6 and 13).³³

The naisargikadoṣas or mahādoṣas of mercury are eight in number: *nāga*, *vaṅga*,

mala, *vahni*, *cāpalya*, *viṣa*, *giri*, and *asahyāgni*;³⁴ the most important of this group are *viṣa*, *vahni* and *mala* (1.16–19ab). The doṣas are twelve in number according to another classification:³⁵ two *yaugikadoṣas*: *nāga* and *vaṅga*, seven *kañcukas* or *aupādhikadoṣas*: *bhūmija*, *girija*, *vārja*, two kinds of *nāgaja*, and two kinds of *vaṅgaja*, supplemented by the doṣas called *viṣa*, *vahni* and *mala* (1.19cd–22ab).

The ritual preceding the alchemical enterprise is described very concisely; one should praise one's guru and pay homage to *Kanyā* (= *Kumārī*), *Vaṭuka* (= *Bhairava*), *Gaṇeśa*, the *Yoginī*, and the *Kṣetrapālas* (1.27cd–30ab).

The *saṃskāra* called *anuvāsana* is described twice (1.104–105).³⁶

*Mūrchanā*³⁷ is of various types: *nirgandha*- and *sagandhamūrchanā*; the *nirgandha* type is not subdivided; *sagandhamūrchanā* is of three varieties: *bahirdhūma*-, *antar-dhūma*- and *nirdhūmamūrchanā*; *nirdhūmamūrchanā* is of five types: *gandhapiṣṭi*, *gandhabaddharasa*, *gandhajīrṇarasa*, *gandhakajjalī*, and *dhātupiṣṭi* (1.137).³⁸ Two particular *bijas*, borrowed from the *Siddhamata*, are called *lohabhekī* and *tārabhekī* (1.298–299).³⁹ The *Siddhamata* employs the term *bheka* to designate a *dhātu* (1.301).⁴⁰ The types of *vedha* called *kuntavedha*, *kṣepavedha*, etc., are not dealt with.⁴¹ The alchemist is advised to sell his artificial gold in the market of a city (1.327).⁴² Methods for making artificial silver and gold by means of the deposition of coloured surface-films are discussed (1.329–350: *tāravatī* and *hemavatī vidyā*).

The *bandhas* of mercury receive much attention (1.351–390). The descriptions of the twenty-five *bandhas* are taken from the *Rasaratnasamuccaya*.⁴³ A disagreeing view, distinguishing four *bandhas*, is quoted from an unspecified source; these types are *pāta*-, *khota*-, *jalaūkā*- and *bhasmabandha* (1.363).⁴⁴ *Pātabandha* is the same as *parpaṭikābandha*;⁴⁵ *piṣṭibandha* results in a *khōṭaka*;⁴⁶ *jalaūkābandha*⁴⁷ is identical with *pakvabandha* (1.364);⁴⁸ two varieties of *sūtabhasman*, the product of *bhasmabandha*, are mentioned: *ūrdhvaga* and *adhoga*; *ūrdhvgabhasman* is of two kinds: *rasasindūra* and *rasakarpūra* (1.365).⁴⁹

A process called *mūrchanā*, but altogether different from the third *saṃskāra*, also known as *mūrchanā*, makes a *bhasman* out of mercury (1.391–396).⁵⁰

The twenty *uparasas* listed in chapter two (2.1) are the same as those mentioned in the *Dhanvantārīyanighaṇṭu* (7.92).⁵¹ The second series of twenty (or twenty-one) *uparasas* (2.347–349) is not known to me from an earlier work. The third list of eight *uparasas* (2.350–351) is found in the *Rasahrdaya*, *Rasaprakāśasudhākara*, *Rasendracūdāmaṇi*, and other treatises. The eight *rasas* (2.350) agree with those called *mahārasa* in the *Dhanvantārīyanighaṇṭu*.⁵²

Four varieties of sulphur are distinguished: red (called *śukatuṇḍa*), yellow (called *āmalaśāra*), white (called *khaṭikā*) and black (2.11cd–13), three varieties of cinnabar: *carṃāra*, *śukatuṇḍaka* and *haṃsapāda* (2.70cd–72ab), four varieties of mica: white (= *brāhmaṇa*), red (= *kṣatriya*), yellow (= *vaiśya*) and black (= *śūdra*), four varieties of black mica: *pināka*, *dardura*, *nāga* and *vajra* (2.91–93), two varieties of *haritāla*: *patrākhya* and *piṇḍasaṃjñaka* (2.173–175).⁵³

A time-consuming way of preparing a powerful *haritālabhasman* from a variety called *tabakī* is described according to the *Siddhamata*; this process, taking 441 days, results in a product that cures numerous diseases. Twenty-one different plant juices are

employed;⁵⁴ the purified haritāla has to be steeped in or rubbed with each of these juices for twenty-one days, followed by heating of the powder obtained for eight days. The bhasman is claimed to cure all kinds of diseases, amongst which are eighteen disorders of the blood (raktavikāra),⁵⁵ the group of kaṭhinavikāras,⁵⁶ the mūḍhavikāras,⁵⁷ phiraṅga, and the ten disorders caused by blood (raktajaroga),⁵⁸ etc. (2.209).

The four varieties of haritāla acknowledged in the *Siddhamata* are bugadādī, godantī, tabakī and piṇḍatāla (2.209).

Three varieties of manāṣīlā are described: śyāmāṅgī, kaṇavīrikā and dvikhaṇḍākyā (2.215–217). Two varieties of sroto'ñjana are recognized by the author: sroto'ñjana, which is black, and sauṇvīra, which is white; another classification acknowledges five types: sroto'ñjana, sauṇvīra, rasāñjana, nilāñjana and puṣpāñjana (2.225–227); the variety called kulatthikā is added (2.240–241). Capala is regarded as a sādharāṇarasa, but hiṅgula and mṛddāraśṅga are not mentioned as belonging to this group (2.345). Rājāvarta, considered to be one of the uparasas or a ratna, is of two kinds: rakta and nīla (2.247–248). Two kinds of khaṭikā are described: khaṭī and gaurakhaṭī (2.264). Three varieties of gairika are distinguished: svarṇa-, sāmānya- and pāṣāṇākyagairika (2.268–269), two varieties of kāśīsa: pāṃsu- and puṣpakāśīsa (2.273), two varieties of rasaka or kharpara: dardura and kāravellaka (2.276–278ab), three varieties of kapardikā or varāṭikā: red, white and yellow (2.294–295), supplemented by a black type with white spots (2.295cd–296ab), three varieties of bola: rakta, śyāma and manuṣyaja (2.306), and two varieties of kaṅkuṣṭha: nalikākhyā and reṇuka (2.312). Kaṅkuṣṭha is regarded as a substance found in the Himālaya, but disagreeing opinions are given too (2.312–317). Two varieties of gaurīpāṣāṇa are described: a white artificial one, and a yellow, naturally occurring one (3.336–337), and two varieties of bodāraśṅgaka: yellow and pale (3.343).

The metals (dhātu) are seven or nine in number; the series of seven consists of gold, silver, copper, tin, zinc, lead and iron (3.1); the series of nine metals, connected with the nine grahas, comprises gold, silver, copper, tin, lead, tīkṣṇaka, āra (= pittala), kāṃsya and vartaloḥa (3.3–4ab). The usual varieties of gold, silver, copper, tin and lead are described. The three varieties of muṇḍaloḥa are mṛdu, kuṇṭha and kaḍāraka (3.206); the six varieties of tīkṣṇaloḥa are kharākhyā, sārasaṃjñaka, huntāla, tāravatṭa, vājira, and kālaka (3.207); the five varieties of kāntaloḥa are bhrāmaka, cumbaka, karṣaka, drāvaka and romaka (3.208). Three varieties of vimala are described: svarṇa-, rūpya- and kāṃsyavimāla (4.27), two varieties of pittala (brass): rājarīṭikā and kākatuṇḍī (4.69). The alloy, called pañcaloḥa or bharta, consists of bronze (kāṃsya), brass (pittala), copper, lead and tin (4.83).

Śilājatu has its origin in rocks or an alkaline earth (4.93); the first kind is of four varieties: sauvarṇa, rājata, tāmra and āyasa (4.94–98); another kind of śilājatu, used in fireworks (agnibāṇa),⁵⁹ is called soraka (4.133). The usual four varieties of capala are mentioned: white, black, yellowish green (harit) and red (4.136).

The nine major gems (ratna) are, according to a quotation from the *Rasapaddhati*: vajra (diamond), vidrūma (coral), mauktika (pearl), marakata (emerald), vaidūrya, gomedaka, māṇikya (ruby), harinīla (sapphire), and puṣpadṛśad (topaz); the same

series is found in the *Viṣṇudharmottarapurāṇa*, cited by Mādhava (5.4–6ab). Minor gems (uparatna) mentioned by name are: vaikrānta, sūryakānta, candrakānta, rājāvarta, lāla,⁶⁰ peroja, muktāśukti, śaṅkha, karpūrāśman, and coloured glass (kācaja maṇi) (5.6–8). Two varieties of peroja (turquoise) are described: bhasmāṅga and harita (5.148); eight varieties of vaikrānta are referred to (5.164).

The ten poisons, derived from bulbous or tuberous plants (kandabhava), which may be used in medicine (saumya), are: saktuka, mustaka, kaurma, dārvika, sārṣapa, saikata, vatsanābha and śvetaśṛṅgī (6.11); the ten ugra poisons to be avoided in medicine are: kālakūṭa, meṣaśṛṅgī, darduraka, hālāhala, karkoṭī, granthi, hāridra, raktaśṛṅgī, kesara, and yamadaṃṣṭrā (6.20–21). The nine vegetable poisons distinguished by other authorities are: vatsanābha, hāridra, saktuka, pradīpana, śṛṅgika, kālakūṭa, saurāṣṭrika, and hālāhala; they are said to be found in mountainous regions, in haridrā regions,⁶¹ in the mountains, in flat regions, in Surāṣṭra, in the vicinity of kapilā riverbanks, in Ahicchatra, on the mountain Kiskindha, and on the mountain called Brahma respectively (6.40).⁶² The minor poisons of vegetable origin (upaviṣa) are seven in number: arka, sehuṇḍa, dhattūra, lāṅgalī, karavīraka, guñjā, and ahiphena (6.108); their number is nine according to other authorities: arka, snuḥ (= sehuṇḍa), lāṅgalī, guñjā, hayārī (= karavīra), viṣamuṣṭī, āphena (= ahiphena), unmatta (= dhattūra), and jepāla (6.111). An added item is bhāṅgā.

The extent to which the *Āyurvedaprakāśa* consists of quotations from earlier treatises is, in particular, elucidated in Somadevaśarman's commentary. The glosses in prose can be attributed to Mādhava himself, who does not hesitate to give his own opinion on some issues⁶³ and refers to the tradition transmitted by his guru.⁶⁴ The views adopted by him are repeatedly indicated, followed by disagreeing opinions.

In several instances the vernacular name of a substance is recorded.⁶⁵

The author

The author's name is Śrīmādhava Upādhyāya of Sārāsvata lineage, born in Saurāṣṭra, but residing in Kāśī.⁶⁶

Date

The earliest MS of Mādhava's *Pākāvalī* may be completed in A.D. 1713 or 1813.⁶⁷ The earliest MS of the *Āyurvedaprakāśa* dates from A.D. 1786 (IO Nr. 2696); the original of another MS may have been written in A.D. 1673/74.⁶⁸

Two sources of the *Āyurvedaprakāśa*, namely the *Rasapaddhati* and the *Yogataraṅgiṇī*, belong to the first half of the seventeenth century. The quotations from the *Bhāvaprakāśa* and the *Rasapaddhati* prove that Mādhava Upādhyāya is later than the sixteenth century.

The evidence available establishes that the *Āyurvedaprakāśa* dates from the second half of the seventeenth century.⁶⁹

Commentaries

A Sanskrit commentary, called *Arthavidyotini*, on the whole of the *Āyurvedaprakāśa*, was written by Guṛājārmamiśra.⁷⁰

This useful and lucid commentary quotes from and refers to the following authorities and works: Āḍhamalla (1.174–179), Ādityaḥṛdaya (1.139),⁷¹ Āgama (1.396), Amara,⁷² Ānandakanda (1.363), Ātreya (2.338–340), Bhagavadukti (1.130), Bhāratiyaśāstra by Desāi (2.276–278ab),⁷³ Bhartṛhari (1.130), Bhāvaprakāśa (1.418–425; 6.25–34ab), Bhāvaprakāśanighaṇṭu (2.276–278ab),⁷⁴ Bhuṣundopākhyāna (1.133–134ab),⁷⁵ Bindu (2.133–134ab),⁷⁶ Brhadvāsīṣṭha (1.133–134ab),⁷⁷ Caraka (1.113, 127, 382, 539, 540, 547, 559cd–561; 3.295–296), Cūdāmaṇi (2.234 and 350–351; 3.77–78, 205, 244–245ab),⁷⁸ Ḍallaṇa (2.316–317), Devayāmalaka (1.481), Devendragiri (3.140–142),⁷⁹ Dhunḍhukanātha (1.401–403; 3.93–96),⁸⁰ Gaṅgādhara (1.547),⁸¹ Gorakṣanātha (1.137), Govinda (1.277–280 and 308–309),⁸² Govinda-bhikṣu (1.323),⁸³ Hājārīlālasukula (1.466–469ab),⁸⁴ Hemacandra (1.509–522),⁸⁵ Hemādri (2.316–317; 6.90–95), Kālanātha (1.137 and 401–403),⁸⁶ Lohapaddhati (2.253; 3.207cd and 208–209), Mahābhārata (1.130), Maheśvara (1.108–112 and 136),⁸⁷ Medinī (1.136), Nāgārjuna (2.281–283), Nandin (2.270–272), Nārāyaṇa (3.192cd–193), Nighaṇṭu (1.162cd–163, 397, 428cd–435),⁸⁸ Nighaṇṭurāja (1.173), Nityanātha (1.106), Padmanābhasūnu (2.273–275),⁸⁹ Pāṇini (1.3), Raghunāthasampradāya (1.463), Rasacintāmaṇi (1.137 and 251), Rasadarpaṇa (1.187), Rasahṛdaya (often), Rasakāmadhenu (often), Rasamañjarī (often), Rasamārtanḍa (1.52–54ab), Rasāmṛta (3.1 and 25–26), Rasapaddhati (often), Rasapaddhatiṭīkā by Mahādeva (2.141–142; 4.133), Rasaprakāśasudhākara (often), Rasaratnākara (often), Rasaratnasamuccaya (often), Rasaratnasamuccayaṭīkā (2.276–278ab; 4.30), Rasārṇava (often), Rasasamketakalikā (1.399–400, 436–441), Rasasāra (often), Rasatarāṅgiṇī (1.174–179, 399–400, 442–444ab, 444cd–448, 483), Rasavāgbhaṭa (2.273–275; 3.1, 6cd–10ab and 190–192ab), Rasāyanasāra (3.177cd–180 and 192cd–193ab), Rasāyanasārasaṃgraha (1.362), Rasendracintāmaṇi (often), Rasendracintāmaṇiṭīkā (1.192), Rasendracūdāmaṇi (often), Rasendrasārasaṃgraha (often), Śaivālabhakṣya (1.191), Śaktiyavatāra (1.88–89), Śāligrāmanighaṇṭubhūṣaṇa (1.277–280), Sāmkhyakārikā (1.131 and 132), Śārṅgadharā (1.174–179; 3.282cd–284ab), Śārṅgadharāṭippaṇī (3.52cd–53), Siddha-bhaiṣajyamañjūṣā by Jayadeva and its vyākhyā (3.30), Siddhabheṣajamaṇimālā (3.177cd–180), Śivāgama (1.118–121ab), Śivamata (3.3–4ab), Śrīmadbhāgavatā (1.131), Suśruta (1.7, 127; 2.209; 3.30; 6.78–79 and 80–86), Ṭoḍarānanda (1.191 and 367), Vāgbhaṭa (1.1), vaijñānikāḥ (2.350–351; 5.27), Vāsīṣṭhamahārāmāyaṇa (1.133–134ab),⁹⁰ Veda (1.1), Yaśodhara (2.91–93),⁹¹ and yūnānīgranthakārāḥ (2.341).

The author of this commentary mentions rather often variant readings of the text of the *Āyurvedaprakāśa*.⁹²

Somadevaśarman wrote two commentaries on chapter one of the *Āyurvedaprakāśa*, one in Sanskrit and called *Pradīpa*, the other in Hindī and called *Uddyota*.

Authorities and works quoted or referred to in these commentaries are:⁹³ Ānandakanda (1.223–228, 391–394, 433cd–435, 458–459, 460), Aṣṭāṅgaḥṛdaya (1.130),

Bhagavadgovindapāda, Bhāvaprakāśa, Brhadrasarājasundara (1.123–126 and 399–400), Cakrapāṇi's *Cikitsāsaṃgraha* (1.5), Dhunḍhukanātha (1.1), Govinda (1.307), Mahābhārata (1.130), Rasacintāmaṇi, Rasahṛdaya, Rasakāmadhenu, Rasamañjarī, Rasamārtanḍa (1.283–285), Rasāmṛta (1.408), Rasapaddhati, Rasapaddhatiṭīkā, Rasaprakāśasudhākara, Rasaratnadīpikā, Rasaratnākara, Rasaratnapradīpa, Rasaratnapradīpikā, Rasaratnasamuccaya, Rasārṇava, Rasasamketakalikā, Rasasāra, Rasasindhu (1.123–126), Rasatarāṅgiṇī, Rasendracintāmaṇi, Rasendracūdāmaṇi, Rasendrasārasaṃgraha, Rudrayāmala (1.123–126), Sāmkhyatattvakaumudī (1.131), Śārṅgadharasamhitā, Somadeva, Vāgbhaṭa, Vaidyakaśabdasindhu (1.426–428ab), Viśva (1.5), Yaśodhara, Yogaratnākara, Yogatarāṅgiṇī, and Yogavāsīṣṭha (1.133–134).

Somadevaśarman systematically indicates the metres of Mādhava's verses. Occasionally, he criticizes the readings adopted in ed. a.

Somadevaśarman was a Sārasvata brāhmaṇa, son of Raghunandanaśarman; he lived in a village called Bhavīgarh in the vicinity of Aligarh.⁹⁴

Chapter 3 *Gorakṣasamhitā*

The *Gorakṣasamhitā*¹ is a Tantric text, part of which deals with alchemy.

Contents

The edited text of the treatise² is divided into two sections, a *Kāḍiprakaraṇa* in twenty-seven chapters (*paṭala*) on Tantric subjects,³ and a *Bhūtiprakaraṇa* in nine chapters (*paṭala*) on alchemy.⁴ The *Bhūtiprakaraṇa* is written in the form of a dialogue between Śrīkaṇṭha (= Śiva) and Śakti.

Chapter one of the *Bhūtiprakaraṇa* (*rasaphalāphalavarṇana*; 123 verses) is of an introductory character. Some of its subjects are: the secret nature of the alchemical art, the persons to whom it may be transmitted, the praise of mercury, and the treatises on alchemy which the work summarizes.

Chapter two (*dravyasaṃgrahaṇa*; 105 verses) is about the *nibandhana* of mercury (1–5ab), the eight *rasas* (5cd–20ab), the eight *uparasas* (20cd–29), the eight *rasaloḥas* (30–40), precious and semi-precious stones (41–52), a substance of animal origin (53–56), the six kinds of salt (57–59), the three kinds of *kṣāra* (60ab), poisonous substances (60cd–65a), oils (65b–66), *vasā* (67–68ab), urine (68cd), semen and menstrual discharge (69), *kṣāras* (69cd–73ab), *jāraka* substances (73cd–77), *drāvaka* substances (78–81), acids (*amlāni*; 82–85), the *rakta-*, *pīta-*, *kṛṣṇa-* and *sitavarga* (86–97), and some alchemical operations (98–105).

Chapter three (*dhātuśuddhi*; 97 verses) is concerned with the eighteen *saṃskāras* (3cd–6), the eight *saṃskāras* (*aṣṭavidhā śuddhiḥ*) resulting in the purification of mercury (7–25ab), and the purification of the *rasas*, *uparasas* and *lohas* (25cd–97).

Chapter four (*jīvotsargavidhāna*; 152 verses) discusses the *bandha* of mercury; four types of *bandha* are referred to (3cd–4); several alchemical operations are described, in particular *sattvapātana*, and some apparatus (6cd–116);⁵ the construction of the alchemical workshop (*rasamaṇḍapa*) and its inventory are dealt with (117–129ab); the chapter ends with verses on good and bad types of teachers (129cd–152).

Chapter five (*bījasambandha*; 302 verses) deals with *samukhacāraṇa* (5–44), *nirmukhacāraṇa* by means of divine herbs (45–57ab), types of *grāsa* (65–79ab), *biḍa*, *bīja*, and several operations (*garbhadruti*, *rañjana*, etc.) (79cd–302).

Chapter six (*rasoparasaṅkarman*; 582 verses) is about alchemical operations involving *sūryakānta* (8–36ab), *candrakānta* (36cd–50ab), *tārakānta* (50cd–60), *capala* (61–70ab), *vajra* (70cd–79), *raktābhra* (80–96ab), *sasyaka* (96cd–117ab), *adrija* (117cd–125; = *śilājātu*), *vimala* (126–182), *mākṣika* (183–250ab), *rasaka* (250cd–297), *darada*

(298–309ab), *gandhaka* (309cd–422ab), *gairika* (422cd–535ab), and *sauvīra* (535cd–582).

Chapter seven (*divyauṣadhilakṣaṇakarman*; 374 verses)⁶ describes the sixty-four divine herbs (*divyauṣadhi*; 1–106) and their uses in alchemical operations (107–152); the middle part of the chapter is devoted to vegetable poisons and their uses (153–209ab); the last part of the chapter contains a long *amlavetasakalpa* (209cd–326) and rules concerning the use of *rasāyana* preparations (350–374).

Chapter eight (229 verses)⁷ gives an account of the origin of (*ayas*)*kānta* and its uses, followed by verses on some other *dhātus* and related subjects.

Chapter nine (*śivasūtra*, *rasāyanavidhi*; verses 74–141)⁸ gives rules for the adepts and describes the results of their efforts.

The only authority mentioned is Nandin (9.134).

Special features

The *Bhūtiprakaraṇa* of the *Gorakṣasamhitā* is mainly devoted to alchemy and the objectives of its quest: *dehasiddhi* and *lohasiddhi*; preparations which are curative of particular diseases are occasionally dealt with, for example in the *amlavetasakalpa* (7.210cd–326).⁹

The arrangement of the material is not very systematic. The first eight of the eighteen *saṃskāras* are described, the remaining ones are referred to. The *yantras*, *mūṣās* and *puṭas* are not characterized; the substances used in alchemical operations, their varieties, properties, etc., are incidentally described. Several groups of substances and the items belonging to these groups are, however, dealt with in chapter two. The divine herbs are discussed in chapter seven.

The main accent of the *Bhūtiprakaraṇa* is on the *bandha* of mercury. A term used to designate alchemy is *bhūtitantra* (2.101; 3.1) or *bhūtīśāstra* (2.3; 4.3). *Bhūti* is a term frequently employed to designate one of the aims of the alchemist; other aims mentioned are the usual ones: *āyus* (7.374), *cakravartitva* (1.109), *divyadehatva* (5.176), *khecaratva* (5.168), the *siddhis* (5.177), etc., next to the making of artificial gold and silver.

Śiva worship is a conspicuous feature. Mantras are repeatedly referred to; examples are the *aghoramantra* (6.45; 7.162), *kāmikamantra* (7.163), *viśvarūpā vidyā* (6.477 and 479; 9.130), and *trailokyadāmaramantra* (7.163).

Grammatical faults are rather frequent.¹⁰ Some vernacular terms are also met with.¹¹

Chapter one relates that a very large alchemical work (a *rasatantra*), in 25,000 verses, was once revealed by *Svacchanda* (= Śiva). Basing themselves upon this work, several gods composed their own treatises on the subject; these treatises are: *Devī's Mahodadhi* in 12,000 verses, *Umā's Rasopaniṣad* in 6,000 verses, *Guha's Rasatantra* in 6,000 verses, *Virabhadrā's Rasatantra* in 1,000 verses, *Śukra's Rasāvaloka* in 6,000 verses, *Bṛhaspati's Rasacakra* in 8,000 verses, *Candra's Rasāṅkuṣa* in 10,000 verses, and *Vināyaka's Rasodaya* in 8,000 verses (1.111–120). The *Bhūtiprakaraṇa* is said to be an abridgement of Śiva's original work.¹²

Chapter two describes mica (ghana) as originating from Umā's yoni (6ab); mica is of four colours: white, yellow, red and black (6cd); two varieties only are distinguished: vajra and māṇḍūkā (27).¹³ Mica is one of the eight (mahā)rasas:¹⁴ abhṛaka or ghana, vaikrānta, vimāla, rasaka, śaila, māṅṣika, darada (= hiṅgula), and sasyaka (19–20). Several varieties of vaikrāntaka are referred to (8cd). Vimāla is of two kinds: white and yellow (11cd–12ab),¹⁵ rasaka of three kinds: mṛttikārasaka, guḍābha and pāṣāṇābha (12cd–13), śaila of four kinds, different in colour (14), māṅṣika of two kinds: white and yellow (15ab), or of four types: kadambākāra, golakākāra, kāravellakasaṃnibha, and aṅgulīyaka (15cd–16), darada (cinnabar) of three types: camari,¹⁶ śukatuṇḍa and haṃsapāda (17), and sasyaka of one type (18ab).

The eight uparasas are: gandha (sulphur), (harit)āla, gairika, (manaḥ)śilā, kāṅkṣī, kāsīsa, añjana, and kaṅkuṣṭha (28cd–29).¹⁷ Haritāla is of two kinds: pale red (pātala) and yellow (22ab), gairika of one type (22cd–23), manaḥśilā of one type (24ab),¹⁸ kāṅkṣī of two types: śyāmā and kapilā (24cd), kāsīsa of three types: white, śyāma and yellow (25cd–27ab);¹⁹ añjana²⁰ and kaṅkustha are of one type (27cd–28ab).

An unusual group of eight rasalohas²¹ is described, which may, partly at least, consist of substances called sattva in other texts.²² The group consists of: kāntaja, khuraloha,²³ nānākārāśmaja, khaja, vaikrāntakodbhava, śailaja, sasyakasambhava, and māṅṣikamalaja; the colours and properties of these rasalohas are mentioned (30–40ab).

The six metals (āyasa) are: gold (agni), silver (soma), copper (arka), iron (tīkṣṇa), tin (vaṅga), and lead (nāga) (40cd).

The five rasaratnas (precious stones) are: padmarāga (ruby), indraṇīla (sapphire), marakata (emerald), puṣparāga (topaz), and vajra (diamond) (44cd–45ab). Nṛpāvarta (= rājāvarta), tuttha, vidrūma, and artificial gems (vaidambaka: mock gem) are called the maṇīrasas (47).²⁴ The group of the three mahāmaṇīs consists of sūryakānta, candra-kānta and tārakānta (48–50ab).

Substances useful in the bandha of mercury are: mṛganābhi (musc), mātthara, ambujaśūka (= jalaśūka), the milky juice (payas) of rakṣura, niśāra or nṛśāra, gautamakāśara, tagara, nāgasamjñita, lelītaka, srotaja, kṛṣṇāgaru, and sita (50cd–56). The six types of salt are: sāṃudra, saindhava, viḍa, sauvarcala, romaka, and culikā-lavaṇa or navasāra (58–59). The three caustics (kṣāra) are: yava(kṣāra), svarjika and ṭaṅkaṇa (60ab).

The five (major) poisonous substances are: śaktuka, kṛṣṇa, śṛṅgika, mustaka and vatsanābha (60cd–64ab). The five upaviṣas are: snuḥī, arka, karavīra, lāṅgalī and vi-śamuṣṭika (64cd–65a). Oils used in alchemical operations are extracted from the plants called jyotiṣmatī, naktamālā, rubuka (= eraṇḍa), āruṣkara, akṣa, āṅkola, palāśa, bākcūṭi, apāmārga, and unmatta (65b–66). The fatty substances (vasā: 67–68ab), urines (68cd), kinds of semen and menstrual discharge (bīja, puṣpa; 69ab) used are enumerated. A pitāvarga and viḍvarga are absent.²⁵

The list of plants from which a kṣāra may be prepared is long. The plants mentioned are: apāmārga, arka, aśvamāra, caṇaka, eraṇḍa, gotama, gūthavṛkṣa, kadālī, ka-ñcukī, kāraka, kuṭaja, mokṣaka, muṣṭika, nikṣāra, nikura, niṣpāva, palāśa, rakṣuraka, raktamālā, snuḥī, suradālī,²⁶ tila, udumbarī, unmatta, vajrakandaka, varṣābhū, and vā-

stuka (69cd–72). A list of acids derived from plants follows (82–84). The substances belonging to the rakta-, pita-, kṛṣṇa- and śvetavarga are enumerated towards the end of the chapter (86–97).

Chapter three mentions the following eighteen saṃskāras: svedana, mardana, mūrchana, utthāpāna, pātana, dīpana, nirodha, niyāmana, cāraṇa, garbhasaṃdrāva, jāraṇa, pātana again, grāsapramāṇa, rañjana, sāraṇa, krāmaṇa, vedha, and śarīrāvāpa (4–6).²⁷

Five plants are called the five kumārikās: karkoṭī, ūṣanetrā, śukatuṇḍā, vāyāsī and javā (16); ūṣapatrā, agniya, varya and the two vaṭamālās are the five vāruṇas (17cd–18ab).

The drāvika plants enumerated are: bāṣpikā, ciñcikā, halinī, kaṇā, kañcukī, kāravallikā, koṣātakī, kumārikā, prāvṛtā, suradālī, sūryāvarta, vajrakanda, and vandhyā (70–71).²⁸

Chapter four refers to four types of bandha (3), but describes only dravabandha (6); gola- and bhasmabandha are mentioned without being characterized (4).²⁹ The colours of the flames produced by various substances are mentioned (113–114).

Chapter five enumerates sixty-four plants used in the bandhana of mercury: ahilocanā,³⁰ ajamārī, alambuṣā, añjalikārī, aparājītā, apatrā, ardhacandrā,³¹ bimbi, brāhmī, bṛhatī, citraparṇī,³² dantī, durgandhā, gāruḍī, gojihvikā, halinī, haṃsapādī, hemapuṣpikā, īśvarī, jalamūlikā, jalaparvāmbuṣī,³³ jalapippalī, jalodbhavāpāmārga, jvālīnī, kapotī, kṣīrī, kumārī, kumbhaka, kurkurī, lakṣmaṇā, māṅṣī, māṇḍūlikā, mārjārapādikā, meghanādā, meṣakā, mīnākṣī,³⁴ mohinī, mūrtī, muṣalī, nāginī, nandinī, pāṣāṇabhedikā, prasārīṇī (sthalajā prasārīṇī), samaṅgā (sthalajā samaṅgā), samaṅgā (vārisambhūtā samaṅgā), saracandraukasa, sārīkā, sarpasugandhikā, śikhā, śikhipādī, sitagandhā khagā, śukanāsā, triparṇikā, tulasī, tuṣī, upāmbu, upodikā, utpalī (jalajā utpalī padmā), uttamā, vajrakandaka, vanakārpāsī, vanamālā, vanāñjikā, vārāhī, vāyāsī, vidārī, vṛṣcikālikā, and yavaciñcī (46–57).³⁵

The types of rasa that are formed on the addition of grāsa are called daṇḍadhārīn or daṇḍadhṛk, pāyasa or payasākāra, jalūkā or jalaukākāravat, vidruṣa, chedin, dadhivat, navaṇīta, and piṇḍa or khaṇḍa (65–71).³⁶

Chapter six mentions the usual four varieties of capala (64ab). The mahārasas rasa and rasaka are praised for their suitability to make artificial gold and silver (269cd–270ab). Dānavendra is a term repeatedly employed to designate sulphur (294, 309, 315, 356, etc.).

Chapter seven is concerned with plants used in alchemy: divyauśadhis, mahauśadhis and rasauśadhis (5), divided into the following types: tṛṇa, gulma, latā, vallī, vṛkṣa, and visarpiṇī (6).³⁷

The plants described³⁸ are: ajagarī (21–22ab), āmrātakī (34), aṃṣumatī or rudantī (26cd–28ab), aśokā (36), āsurī (85cd–86ab), bhedinī (52cd–53ab), bhṛṅgā (93ab), bhūkadamba (25–26ab), bhūtakeṣī or kṛṣṇavallī (24), bilvātakī (100), brahmadandī (64cd–65), camarī (93cd–94ab), chattrī (39cd–40ab), devaśrī (75–77ab), devī (42), gandharvī (86cd–87ab), gāruḍī (80), gomārī (87cd–88ab), gonasī (22cd), gorocanā (101–103), goṣṛṅgī (58–59), hemadaṇḍā (69), hemalatā (84cd–85ab), īśvarī (23cd), jayā (74), jyotistṛṇa, jyotirvṛkṣa, jyotiḥkanda (61cd–62ab), kālakarṇī (48cd–49ab), karavīrī (94cd–95ab), khadirapatrīkā (60–61ab), kīṭamārī (77cd–78), kṛṣṇacitraka or

goptar (44), madhutṛṇā (67cd–68), nāginī (38cd–39ab), naradevī (56cd–57), nīlotpalā (49cd–50ab), padmaḍḍī (66–67ab), palāśavallī (45–46), pītamustakikā (97), punnāgapatrikā (37–38ab), rajanī (50cd–51ab), raktavallī (62cd–64ab), rohiṇī (99), saṃvarī (28cd–30ab), śataparvā (33), savarī (40cd–41), śimhikā (51cd–52ab), śirīṣā (88cd), somā (7–8ab),³⁹ somavallī (9–19ab), somavṛkṣa (8cd), śrījayā (71–72ab), sthalajā padminī (19cd–20), tāmbūlapatrī (70), tārājā (47–48ab), tilakā (53cd–54ab), tridaṇḍī (92), tripatrā (35), triśalyā (104–105), triśūlī (90–91), tumbinī (81–84ab), uccaṭā (23ab), vajrā (95cd–96), vajravallī (43), vanakustumbarī (89), vārāhī (30cd–31ab), vijayā (72–73), vīravallī (798), and vyāghrī (79).⁴⁰

An otherwise unknown disorder, called somavṛddhi, is referred to (15).

The amlavetasakalpa gives an account of the mythical origin of this plant (210cd–213) and its appearance (214–216ab); its juice is described as a powerful solvent (drāvaka; 229–233ab).

The style and terminology of the Bhūtiprakaraṇa of the *Gorakṣasaṃhitā* are distinctive, although in some respects reminiscent of the *Rasopaniṣad*.⁴¹ Mercury is very often referred to as śarvaja⁴² and sūta, gold as mātar⁴³ or mātṛkā,⁴⁴ copper as aravinda,⁴⁵ etc.

Compounds with the element cakra- are not rare.⁴⁶

The terms sṛṣṭi and sṛṣṭitraya are frequently employed.⁴⁷ A large number of technical terms are not explained.⁴⁸ The same applies to the preparation of various substances employed in alchemical operations, for example: jyotistaila,⁴⁹ rāgasneha,⁵⁰ raktasneha,⁵¹ and raktataila⁵² (probably synonyms of rañjanataila).⁵³ Sneha is used in the sense of taila⁵⁴ or vasā.⁵⁵

Some mūṣās referred to are agnimūṣā (5.146; 6.575), dharāmūṣā (7.139), and dīrghamūṣā (4.52; 5.135).

Some noteworthy names of plants are ambujaśūka (= jalaśūka; 2.51), amlavallī (2.83; 6.334), candravallī (2.96), cirpotikā (5.123), codyavṛkṣa (8.85), gandhā (2.94), jalaśūka (6.451 and 467), lelītaka (2.52; 6.385 and 472), māṭhara (6.214, 314, 320, 395, 453, 467, 544), rājārka (8.213), rakṣura (2.51), rakṣuraka (2.72), raktagocandanā (6.491), raktāpāmārga (6.340 and 492; 7.189), śrīhastinī (4.72), trirakṣā (6.489), and vṛsodara (9.123).

The author

The author mentions his name, Gorakṣanātha, at the end of the treatise, adding that he wrote it⁵⁶ for the benefit of a king called Siṃha (9.135–136).⁵⁷

Works, attributed to Gorakṣa(nātha), are, apart from the *Gorakṣasaṃhitā*, the *Bandhasarvasva*,⁵⁸ a *Kāmasāstra*,⁵⁹ and the *Raseśvarasiddhānta*.⁶⁰ Gorakṣa(nātha) is moreover credited with a large number of non-medical works.⁶¹

The *Gorakṣasaṃhitā* is not quoted as such in medical treatises,⁶² but citations from the *Svacchandaśaktyavatāra*⁶³ and works with related titles may be from some version of the Bhūtiprakaraṇa.⁶⁴

The *Svacchandāgama* is quoted in Ṭoḍara's *Āyurvedasaukhya*.⁶⁵ The *Svacchandaśaktyāgama* is quoted in Viṣṇudeva's *Rasarājalakṣmī*,⁶⁶ the *Rasaratnapradīpa*, the

Rasasindhu, and Ṭoḍara's *Āyurvedasaukhya*.⁶⁷ The *Svacchandaśaktyāgama* is quoted in Acyuta's *Rasasaṃgrahasiddhānta* and the *Rasarājalakṣmī*. The *Śaktyavatāra* is quoted in one of the parīṣiṣṭas of the *Ānandakanda*,⁶⁸ Guṇrājśarmamiśra's commentary on the *Āyurvedaprakāśa*,⁶⁹ and the *Rasatattvavivecana*.

Gorakṣa is quoted or referred to on subjects connected with āyurveda or rasaśāstra in the *Bṛhadrasarājasundara*,⁷⁰ Cidghanāndanātha's *Satkarmasaṃgraha*,⁷¹ the *Rasakāmadhenu*,⁷² *Rasaratnadīpikā*,⁷³ *Rasaratnākara*,⁷⁴ Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*,⁷⁵ Śivamiśra's *Vaidyaśāstraśivānubhava*, Ṭoḍara's *Āyurvedasaukhya*,⁷⁶ Trimalla's *Bṛhadyogatarāṅgī*⁷⁷ and *Yogatarāṅgī*,⁷⁸ and the *Vaidyacināmaṇi*.⁷⁹

Some formulae attributed to Gorakṣanātha are candreśvarī guṭikā⁸⁰ and gorakṣavaṭī.⁸¹

Gorakṣa(nātha) is the most famous of the nine Nāthasiddhas.⁸² Gorakṣa is mentioned as a Rasasiddha in the *Rasatarāṅgī* and *Rasendrasambhava*, as a Mahāsiddha in the *Haṭhayogapradīpikā*,⁸³ and as a Nātha in the *Ānandakanda*.

Date

The Bhūtiprakaraṇa of the *Gorakṣasaṃhitā* gives the impression of being an early work on rasaśāstra: the terms dhātu and upadhātu are not yet used; zinc is not described; the essence (sattva) of rasaka (i.e., zinc), although known (6.260, 262), is not characterized as a metallic substance.

The Kāḍhiprakaraṇa of the *Gorakṣasaṃhitā* is related to the *Kubjikāmata Tantra*, the oldest MS of which dates from the eleventh century.

The *Gorakṣasaṃhitā*, its Bhūtiprakaraṇa included, may therefore date from about the same period, but a later date cannot be excluded with any certainty.⁸⁴

The period in which Gorakṣa lived is a disputed issue;⁸⁵ dates mentioned in the literature are: middle of the ninth century,⁸⁶ ninth or tenth century,⁸⁷ between the ninth and twelfth centuries,⁸⁸ tenth century,⁸⁹ eleventh century,⁹⁰ not later than A.D.1200, probably early in the eleventh century,⁹¹ earlier than the last quarter of the thirteenth century,⁹² thirteenth century,⁹³ and end fourteenth century.⁹⁴

Chapter 4

Kākacaṇḍeśvarīmatatantra to *Rasahrdayatantra*The *Kākacaṇḍeśvarīmatatantra*

The *Kākacaṇḍeśvarīmatatantra*,¹ written in the form of a conversation between Śiva and Kākacaṇḍī,² deals with many subjects that belong to *rasaśāstra*. The work opens with a scene on the Kailāsa, where Śiva and his spouse are surrounded by a group of Yoginīs who are praising Śiva. Yoginīs mentioned by name are Krandanandī, Mahākālī, Bhṛṅgacaṇḍī, Vināyakī, Kapālī, Kālarātrī, Kālacandrā, Kālāmbikā, Karālī, Kālakarṇī, and Kākacaṇḍeśvarī. Kākacaṇḍī, also called Kākacāmuṇḍā, asks Śiva for instruction on alchemical subjects (2.3: dhātuvāda and rasāyana). Śiva complies with her request and expounds the science.³

The text describes⁴ some *saṃskāras* of mercury,⁵ the making of artificial gold and silver,⁶ *abhrakadruti*,⁷ the making of artificial gems (*ratnakartṛtva*; 2.4), etc. Some types of *mūṣā*,⁸ etc.,⁹ are referred to.¹⁰

The contents and the extent of the work vary in the MSS. A (*Mahā*)*rasāyanavidhī*¹¹ forms part of some versions. One MS contains a number of *kalpas* and *rasayogas*.¹²

It may be that the *Kākacaṇḍīśvarakalpatantra* is related to the *Kākacaṇḍeśvarīmatatantra*.¹³

The *Kākacaṇḍeśvarīmata* is referred to in the *Dattātreyaatantra*,¹⁴ the *Rasakakṣāpuṭa*, Nityanātha's *Rasaratnākara*, Rāmarāja's *Rasaratnapradīpa*, and Viṣṇudeva's *Rasarājalakṣmī* and *Rasasindhu*. The *Kākacaṇḍīśvarītantra* is quoted in the *Pāradasaṃhitā*.¹⁵ The *Kākacaṇḍeśvara* is cited in Ṭoḍara's *Āyurvedasaṃkhyā*¹⁶ and is one of the sources of the *Bṛhadrasarājasundara*.¹⁷

Rāmarāja's acquaintance with the work shows that it antedates the period A.D. 1400–1550. Viṣṇudeva's references to it in his *Rasarājalakṣmī* and *Rasasindhu* establish that it is earlier than the first quarter of the fourteenth century.¹⁸

The *Kākacaṇḍīśvarakalpatantra*

The *Kākacaṇḍīśvarakalpatantra*,¹⁹ a treatise in about 700 verses, contains fifty-one *kalpas*,²⁰ generally belonging to the realm of *rasaśāstra*, as appears from the ingredients of the prescriptions, the effects of their administration, and the terminology used. Each *kalpa* consists of several prescriptions, usually with a particular plant as their main ingredient. The formulae serve to cure diseases, have a *rasāyana* or *vājīkaraṇa* character, or aim at alchemical purposes (*deha-* and *lohasiddhi*). Mantras and Tantric elements are frequent.

The plants and some other substances,²¹ after which the *kalpas* are named, are: *aparājītā*, *uccaṭā*, *nāgadamanī*, *vajravallī*, *vajradantī*, *hastikarṇī*, *mahānīlī*, *śailodaka*, *śvetapunarnavā*, *raktapalāśa*, *brahma*(*vṛkṣa*), *śvetapalāśa*, *kṛṣṇaharidrā*, *kaṭurohiṇī*, *aśvagandhā*, *aṅkola*, *lakṣmaṇā*, *īśvarī*, *śālmalī*, *kākajaṅghā*, *kṣīprā*, *karañja*, *nirguṇḍī*, *indravāruṇī*, *bhṛṅgarāja*, *triphalā*, *udaka*, *musalī*, *muṇḍī*, *citraka*, *maṇḍūka*, *śrīphala* (= *bilva*), *āmalakī*, *śvetaguñjā*, *maṇḍūkabrāhmī*, *vandā*, *vākucī* (= *somarājī*), *rudantī*, *kaṭutumbī*, *iliyālepa*, *nimba*, *trṇajyotis*, *śvetārka*, *bhūkadamba*, *gandhaka*, *devadālī*, *eraṇḍa*, *mayūraśikhā*, *brahmadaṇḍī*, and *sahadevī*.²²

The only authority referred to is Nāgārjuna, to whom one of the prescriptions of the *iliyālepakalpa* is attributed.

The *Kākacaṇḍīśvarakalpatantra* is composed in the form of a conversation between Śiva and Pārvatī.²³ It is not clear whether it forms part of the *Kākacaṇḍeśvarīmatatantra*.²⁴

Kākacaṇḍīśvara is mentioned as a *Rasasiddha* in Caturbhūja's commentary on the *Rasahrdaya* (1.7), the *Pāradasaṃhitā* (1.99), the *Rasaratnasamuccaya* (1.6), the *Rasatarāṅgiṇī* (1.29–32), and the *Rasendrasambhava* (introductory verses). He is a *Mahāsiddha* in Svātmārāma's *Haṭhayogapradīpikā* (1.7).

Kākacaṇḍeśvara is quoted in the *Pāradasaṃhitā*.²⁵ Kākacaṇḍīśvara is quoted²⁶ in the *Pīyūṣaratnamahodadhī* of Akulendranātha²⁷ and the *Rasarāja* of Viṣṇudeva.²⁸

Several verses of the *Kākacaṇḍīśvarakalpatantra* recur in the *kalpa* section of the *Rasārṇavakalpa* of the *Rudrayāmala*.

The date of the work is uncertain.

Special features²⁹

The *uccaṭākalpa* describes *uccaṭā* (2–3), which is also called *vijayā* (15), and mentions locations where this plant is found: the mountain Candrakānta, Hemapuṣṭa, the mountain Jalandhara,³⁰ Kuberaṇagara,³¹ the mountain Naranārāyaṇa, and Saṅkhatīrtha³² (13–14). The *vajravallīkalpa* mentions that *vajravallī* cures the variety of *udara* that is called *maṇḍūkākṛtī*. The *śailodakakalpa*³³ describes four varieties of *śailodaka*, which acts as a powerful *rasāyana* and turns base metals into gold. This type of action, called *vedha*, is obtained within specified periods of time, dependent on the location of the practitioner. Many geographical names are found in this *kalpa*:³⁴ *Aghora*, *Āṅgirasakuṇḍa*, *Bhadrānta*, *Bhūsaila*, *Brahmagiri*,³⁵ *Durgadeśa*, *Gokarṇa*,³⁶ *Kalāgiri*, *Kalindanadī*,³⁷ *Kiṣkindhāparvata*,³⁸ *Mālyakarṇa*, *Mānavarta*, *Nṛsimhanagara*, *Pampā*,³⁹ *Sīmhācala*,⁴⁰ *Sīmhadvīpa*,⁴¹ *Śrīśaila*,⁴² *Tāreśvara*, *Tilodaka*,⁴³ *Vedaparvata*, *Vilānta*, *Vindhya*, *Vyāghrapāda*.⁴⁴

Śailodaka owes its origin to the drops of sweat that fell from Viṣṇu's body when he, in his boar incarnation, raised the earth out of the waters.

The *aṅkolakalpa* describes four varieties of this plant: white, ruddy (*aruṇa*), yellowish (*harit*), and dark (*kṛṣṇa*). The *śālmalikākalpa* mentions four varieties of *śālmalī*: white, ruddy (*aruṇa*), yellowish (*harit*), and yellow (*pīṭa*). The plant called *kṣīprā* is elaborately characterized. The ratios of the ingredients in *triphalā* are: three *niṣkas* of *haritakī*,⁴⁵ six *niṣkas* of *vibhītaka*, and twelve *niṣkas* of *āmalakī*.⁴⁶

The *udakakalpa* gives rules for the amount of water that should be drunk during the

various parts of day and night. The musalīkalpa gives a series of synonyms of this plant. Three varieties of muṇḍī are mentioned, white, red and dark, and two varieties of citraka, called sūcīpatratmukha and maṇḍalapattraka. The maṇḍūkakalpa describes the properties of a gem-like substance in the head of a large frog living in particular places.⁴⁷

The vandākalpa describes the properties of this plant, which depend on the kind of tree on which it grows.⁴⁸ Rudantī, said to grow in mountainous regions like the Himālaya, Kailāsa, Mandara, Vindhya, Śrīśaila, Hemakūṭa⁴⁹ and Pārijāta, is described; four varieties, white, red, yellow and dark, are distinguished. The small tree called iliyālepa or kaṭveraṇḍa⁵⁰ is characterized. Four varieties of eraṇḍa are mentioned: red, yellow, dark and white. Many synonyms of mayūraśikhā are enumerated. Brahmadāṇḍī is of two varieties, white and dark.

The Kūpīpakvarasanirmānavijñāna

The Kūpīpakvarasanirmānavijñāna by Hariśaraṇānanda Vaidya⁵¹ is an iatrochemical treatise in Hindi and Sanskrit.⁵²

This work is of interest on account of its sources, some of which are less well known.

The sources quoted are:⁵³ Agastyaśāstra (161), Agastyaproktagrantha (178), Āyurvedaprakāśa, Basavarājīya, Bhaiṣajyaratnāvalī, Brhadyogatarāṅgī, Cikitsāśāstrakalpavallī (267–268; 318), Cikitsāśāstrabhāṣya (182), Devīyāmala (16), Dharaṇīdharasamhitā (3, 4–5, 6, 14, 80, 95), Laghuvaidyacinatāmaṇi (181, 292, 376–377), Nighaṇṭurātānākara, Nūtanakalpasamgraha (169, 211–212), Nūtanavidhi (297), Rasacāṇḍāmsū (181, 184, 238, 273–274, 351), Rasacinatāmaṇi (207, 246, 302, 326, 327–328, 369, 372–373), Rasacūḍāmaṇi (370, 371), Rasadarpaṇa (110, 129), Rasādhyāya (76, 80), Rasādīpikā (180, 219–220, 239, 260, 288), Rasahṛdaya, Rasahṛdayatikā, Rasajñāna (103–104), Rasakāmadhenu, Rasakarikālīya (185), Rasakaumudī, Rasakovidā (199), Rasālamkāra (222–223), Rasamañjarī, Rasamārtanḍa (109), Rasapaddhati, Rasapaddhatīkā, Rasapradīpa (220–221), Rasaprakāśasudhākara, Rasarājāśaṃkara (195–196, 231, 252, 260–261, 277, 284–285, 326, 366–367), Rasarājāśiromāṇi (258), Rasarājasundara (159, 201, 242, 272–273, 306, 308, 311), Rasaratnākara, Rasaratnamāṇimālā (183, 283, 315–316, 335), Rasaratnapradīpikā (116, 156), Rasaratnasamuccaya, Rasārṇava, Rasasāgara (228–229), Rasasamgrahasiddhānta (292–293), Rasasāra, Rasasāroddhārapaddhati (93), Rasāvatāra (190, 233, 234, 377–378), Rasāvatāra dvitīya (170, 202, 202–203, 203, 258, 286, 345, 352, 360), Rasāyanasamgraha (174, 206, 207–208, 208–209, 210, 216, 221, 225–226, 226–227, 231–232, 236, 249–250, 269, 274–275, 275–276, 287, 289–290, 291, 312, 313, 328–329, 333–334, 364), Rasāyanasāra, Rasendracintāmaṇi, Rasendracūḍāmaṇi, Rasendrakāṭīpadruma (77, 155, 209, 262–263, 324, 348), Rasendramāṅgala (44, 45, 78, 81, 84), Rasendrasārasamgraha, Ratnākaraśādhayoga (160, 165, 174–175, 212–213, 225, 235–236, 281, 282, 288–289, 298–299, 301, 319, 336, 340, 341, 349, 365, 365–366), Rudrayāmala (101–102), Śaivālabhākṣyamata (48), Śārngadharaśāṃhitā, Siddhabhaiṣajyamāṇimālā, Siddhasampradāyagrantha (239–240), Ṭoḍarānanda, Vai-

dyacinatāmaṇi (157, 158, 176–177, 179–180, 183, 191, 218–219, 227, 233, 236–237, 237–238, 240–241, 241, 247, 249, 251, 254, 267, 271–272, 304–305, 305, 310, 324–325, 336–337), Vasāmrta (263–264), Vyāsasampradāyagrantha (194, 205, 254, 255, 256), Yogamahārṇava (164, 215–216, 315, 322, 339),⁵⁴ and Yogaratnākara.

One of the formulae was devised by the author (svanirmita; 363).

The Pāradasaṃhitā

The Pāradasaṃhitā, compiled by Bābū Niraṇjanaprasāda Gupta,⁵⁵ is a very extensive treatise on alchemy and iatrochemistry in sixty chapters. A very large part of the work is written in Hindi, but it also contains very numerous passages in Sanskrit, quoted from diverse sources, both ancient and modern.

Works and authorities on which the Pāradasaṃhitā is based, according to information provided by the author himself,⁵⁶ are: Abhidhānakāmadhenu, Ajīrṇamañjarī, Bhāvaprakāśa, Devīyāmala, Dharaṇīdharasamhitā, Dhāturatnamālā, Gandhakakalpa, Gokarṇa, Kākacaṇḍīśvara, Kalpasāra, Kṣīrasindhu, Lohapaddhati, Nāgārjuna, Nighaṇṭurāja, Purandararāhasya,⁵⁷ Rasacinatāmaṇi, Rasadarpaṇa, Rasahṛdaya, Rasakāmadhenu, Rasālamkāra, Rasamañjarī, Rasamārtanḍa, Rasāmrta, Rasapaddhati, Rasapārijāta, Rasaprakāśa, Rasaprakāśasudhākara, Rasarahasya, Rasarājahamṣa, Rasarājālakṣmī, Rasarājapaddhati, Rasarājāśaṃkara, Rasaratnadīpikā, Rasaratnākara, Rasaratnapradīpa, Rasaratnasamuccaya, Rasārṇava, Rasasamketakalikā, Rasasāra, Rasasāroddhārapaddhati, Rasasindhu, Rasavāgbhaṭa, Rasāvatāra, Rasāyanasārasamgraha, Rasendracintāmaṇi, Rasendracūḍāmaṇi, Rasendrakāṭīpadruma, Śārngadhara, Ṭoḍarānanda, Vaidyabhāskarodaya, Vaidyakāṭīpadruma, and Yogatarāṅgī.

Sources of quotations are for the major part indicated by means of abbreviations which are not listed and elucidated; occasionally, the name of the source is quoted in full.

Works and authorities quoted in the Pāradasaṃhitā are:⁵⁸ Anupānatarāṅgī (109),⁵⁹ Arkaprakāśa (47; 251), Auśadhīkalpalatā (147), Āyurvedavijñāna (233), Bhaiṣajyaratnāvalī (19), Bhāvaprakāśa (24), Brhadyogatarāṅgī (11), Dhanvantarisamhitā (111), Dharaṇīdharasamhitā (1),⁶⁰ Dhāturatnamālā (360), Indrajāla (348, 349), Kākacaṇḍīśvara (143), Kākacaṇḍīśvarīmatatantra (257), Kāmaratna (26), Nāgārjuna (301, 349), Nighaṇṭurātānākara (64), Rasadarpaṇa (155), Rasahṛdaya (74), Rasakāmadhenu (345), Rasamānasa (58), Rasamañjarī (1), Rasapaddhati (131), Rasapārijāta (108), Rasaprakāśasudhākara (75), Rasarājahamṣa (167), Rasarājālakṣmī (107), Rasarājapaddhati (1), Rasarājāśaṃkara (60), Rasarājasundara (490–491), Rasaratnasamuccaya (1), Rasārṇava (23), Rasasāgara (28),⁶¹ Rasasāra (66), Rasasārapaddhati (244), Rasasāroddhārapaddhati (3),⁶² Rasāyanasārasamgraha (5), Rasendracintāmaṇi (18), Rasendrakāṭīpadruma (5), Rasendrasārasamgraha (10), Rasēśvaradarśana (224), Śābdakāṭīpadruma (163), Śārngadhara (110), Siddhālakṣmīśvaratantra (129), Ṭoḍarānanda (11), Vāgbhaṭa (238), Vaidyabhāskarodaya (360), Vaidyadarśa (3),⁶³ Vaidyakāṭīpadruma (233), Vaidyarahasya (340), Vājīkaraṇakāṭīpadruma (263), Yogacinatāmaṇi (233), Yogaratnākara (10), Yogasāgara (362), Yogasāra⁶⁴ (154), and Yogatarāṅgī (9).

Some works in Hindi⁶⁵ and Urdu,⁶⁶ as well as a number of treatises in Persian, are quoted.⁶⁷

Nirañjana and his *Pāradasaṃhitā* are quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya* and in the *Rasatattvavivecana*; the *Pāradasaṃhitā* and some of the works on which it is based are cited in the *Āyurvedīya Khanijavijñāna*. The *Pāradasaṃhitā* was one of the sources of the *Rasavidyāmahārṇava*.

The *Pāradasaṃhitā* (196–106) reproduces the list of Rasasiddhas, found in the *Rasaratnasamuccaya*, but adds the following names to it: Āgama, Bālaki,⁶⁸ Bali, Bāṇāsura, Bindunātha,⁶⁹ Borācolī,⁷⁰ Carpaṭa, Indradhūma, Kāmāri, Kaṇṭhaḍī, Kapila, Kāverī, Koraṇḍaka, Nirañjana,⁷¹ Nityanātha, Prabhudeva,⁷² Pūjyapāda, Ratnaghoṣa, Ratnākara, Siddhabuddha, Siddhapāda,⁷³ Subuddhi, Susenaka, Tīṭṭinī,⁷⁴ Vallabha, Vyālācārya,⁷⁵ and Yajanāman.

The author

The author, youngest son of Rāyabadrīprasāda, an Agravāla vaiśya, a lawyer (vakīl) by profession, was born in 1865/66. Like his father, he became a lawyer in Ālīgarh. His interest in alchemy induced him to study the literature on this science assiduously and to conduct experiments himself.⁷⁶

Date

The *Pāradasaṃhitā* probably dates from the beginning of the twentieth century.⁷⁷

The Rasabhaiśajyakalpanāvijñāna

The *Rasabhaiśajyakalpanāvijñāna* by Saṃtoṣ Kumār Śarmā "Khāṇḍal"⁷⁸ is an elaborate work in Hindi and Sanskrit, dealing with rasaśāstra and with the preparation of āyurvedic medicines.

Contents

Volume one (Rasaśāstra) discusses many subjects belonging to iatrochemistry; volume two (bhaiśajyakalpanā) describes the preparation of various types of āyurvedic medicines and of some particular well-known formulae.

The Sanskrit passages consist of quotations from the following works and authors: Ādhamalla, Amarakośa, Ānandakanda, Aruṇadatta, Aṣṭāṅgahṛdayasaṃhitā, Aṣṭāṅgasamgraha, Ātreyasamhitā, Āyurvedaprakāśa, Āyurvedīyaparibhāṣā by Gaṅgādhara, Bhaiśajyaratnāvalī, Bhāvaprakāśa, the Bodhinīṭikā (by Āśubodha and Nityabodha Senagupta) on the *Rasaratnasamuccaya*, Cakradatta, Cakrapāṇi's commentary on the *Carakasamhitā*, Carakasamhitā, Ḍalhaṇa's commentary on the *Suśrutasaṃhitā*, Dhanvantarisamhitā, Dravyaguṇavijñāna by Yādavjī (Trikamjī Ācārya), Gadaniṅgraha, Halāyudha, Kāśyapasamhitā, Kullūka's commentary on the *Manusmṛti*, Mahābhārata, Nārāyaṇa, Navaparibhāṣā by Upendranāthadāsa, Nighaṇṭuratanākara, Pāradasaṃhitā, Purandararāhasya, Rājanighaṇṭu, Rasacintāmaṇi, Rasahrdaya, Rasajalanidhi, Rasakāmadhenu, Rasapaddhati, Rasaprakāśasudhākara, Rasarājasundara, Rasaratnākara, Rasaratnasamuccaya, Rasārṇava, Rasasamketakalikā, Rasatarāṅgiṇī

and its ūkā, Rasendracintāmaṇi and a commentary on this work by Mañirāma Śarmā, Rasendracūḍāmaṇi, Rasendrasārasaṃgraha, Śāringadharasaṃhitā, Siddhabheṣajamaṇimālā, Suśrutasaṃhitā, Vaidyakaparibhāṣāpradīpa (by Govindasena), Vajrayantikośa, Yajurveda, Yogamahodadhī,⁷⁹ Yogaratnākara, and Yuktikalpataru.

The Rasādhyāya

The *Rasādhyāya* by Kaṅkālāyayogīśiṣya⁸⁰ is an alchemical treatise⁸¹ in 481 verses, arranged in twenty-one chapters (adhikāra);⁸² the text is accompanied by a Sanskrit commentary.

The *Rasādhyāya*⁸³ actually consists of a vārttika on the *Kaṅkālādhyāya* of Kaṅkāla (1).⁸⁴ The author declares that his work is based on the teachings of Kaṅkālāyayogin, who was an expert with regard to rasa, guṇi and añjana (8–9).⁸⁵

The introductory verses contain two maṅgalas, addressed to the arhants (i.e., the Tīrthaṅkaras) (1) and to Bhairava, Bhārati (i.e., Pārvaṭi) and Vighneśa (i.e., Gaṇeśa) (10).

The subjects of the chapters⁸⁶ are: (1) the manufacture of śṛṅghalārasa by subjecting mercury (rasa) to eighteen saṃskāras (12–223); (2) various rājis (224–242);⁸⁷ (3) khāparasattvapātana (the extraction of the essence of khāpara; 243–249);⁸⁸ (4) manahśilāsattvapātana (the extraction of the essence of manahśilā; 250–253); (5) ṣaḍlohadrutikaraṇa (druti of the six metals; 254–269); (6) ṣaḍlohamāraṇa (killing of the six metals; 270–275); (7) hīrakānnapathakaraṇa (the preparation of diamonds for jāraṇa; 276–297ab); (8) hīrakabhasmīkaraṇa (the preparation of the bhasman of diamonds; 297cd–320); (9) gandhakaśodhana (the purification of sulphur; 321–324); (10) gandhakapīṭhīnirmāṇa (the preparation of a powdered form of sulphur; 325–334); (11) gandhakatāilānirmāṇa (the preparation of sulphur oil; 335–339); (12) hemakaraṇa (the making of gold; 340–357); (13) vārigandhakajahrīpiṭhīnirmāṇa (the preparation of a liquefied form of sulphur; 358–364); (14) and (15) gandhakadrutīpiṭhī (the making of gold by means of liquefied sulphur, called vārigandhaka or gandhakadruti; 365–374); (16) tālakaśodhana (the purification of tālaka; 375–383); (17) śuddhatālakakarman (the uses of purified tālaka; 384–403); (18) abhrakadruti (the liquefaction of mica; 404–426); (19) abhrakadrutikarman (the uses of liquefied mica; 427–438); (20) hemavajrabhasmabhūnāgasattvakarmanirūpaṇa (the preparation of a product suitable for deha- and lohasiddhi out of gold, vajrabhasman and the essence of bhūnāga; 439–458); (21) guṭīkāñjanapāradādīnām sevavidhiḥ and bālavādīnīguṭīkānirmāṇa (the preparation of guṭīkāś, añjanas, etc.; 459–478).

An absolute condition for success in the practice of the art is continence and chastity (brahmacharya) and the adherence to dietary restrictions (haviṣyānnabhojana) on the part of both teacher and student (11).

Chapter one describes first the seven kañcukas⁸⁹ and five doṣas of mercury (sūta), which have to be removed by means of various purificatory processes. The names of the seven kañcukas (contaminants) are:⁹⁰ mṛṇmaya, pāṣāṇakañcuka, jalajāta, kapāli, kālikā, śyāmā, and kāpālikā (14); kapāli and kālikā are tin-containing (vaṅgaja), śyāmā and kāpālikā lead-containing (nāgaja) contaminants (15). The five doṣas are maladoṣa,

vahnisaṃbhava, viśadoṣa, darpa, and unmatta (17–18ab).

The seven kañcukas are dangerous impurities which may cause diseases; mṛmāya may lead to kuṣṭha, pāṣāṇasaṃbhava to jāḍya, vārija (= jalajāta) to vātastoma,⁹¹ kapāli and kṛpālikā to cilharī,⁹² kālīkā to gajacarman, dadru, pāṇḍuroga, moha, dubhita⁹³ and kāmālā, and śyāmā to śvetakuṣṭha. The five doṣas are thought to injure the tejas, to cause sattvagāta, ghūrma,⁹⁴ āṅgasphuṭana, and unmattatā (18cd–22).

The remaining part of chapter one gives an account of eighteen saṃskāras. This series consists of pāṭasāraṇa,⁹⁵ mardana, śodhana, mūrchanotthāpana, rasapātana, rasotthāpana, svedana, niyāmana, nirodhana, mukhakarāṇa, jāraṇa, bandhana, sāraṇa, māraṇa, pratisāraṇa, krāmaṇa, vedha, and udghātana (26–30).⁹⁶

The procedures for these saṃskāras are described, together with the effects obtained. Pāṭasāraṇa (31) removes impurities, in particular those associated with the presence of tin or lead in crude mercury. Mardana (32–33) makes impure mercury lose its blackness. The varieties of śodhana (34–42) make mercury free from the kañcukas and doṣas.⁹⁷ Mūrchanotthāpana (43–46) renders purified mercury tejasvin, pātana (47–57ab) abolishes its subtle defects (sūkṣmadoṣa); utthāpana (57cd–69) makes it pervasive (vyāpaka) and clear (svaccha). Svedana (70–82) activates the mukhavāñchā of mercury, i.e., its ability to digest other substances, and increases its heat-resistance; the same properties are further stimulated by niyāmana (38–89) and nirodhana (90–92).

Mukhakarāṇa or mukhaprasāraṇa (93–110), a process brought about by means of a group of niyāmika or yamika drugs, makes mercury lose its wings (pakṣacchinna)⁹⁸ and fit to assimilate other substances. Two series of these herbs and other substances are enumerated. The first series consists of amṛtā, aranyatulasī, candana, cāṅgerī, girikarnī, kṛṣṇā, kṣīrīṇī, madhuka, matsyākṣī, meghanādā, mṛgabhojinī, punarnavā, ravimūlikā, śaṅkhiṇī, śarapuñkhā, śārīvā, sarpākṣī, snuḥī, tiktā, trāyanti, vajrakañcukī, and vajravallī (93–96). The second series consists of adrikarṇikā, ākhuparṇikā, aruṣkara, bhr̥ṅgarāj, brahmadandī, brahmaghnī, ciñcika, citraka, dhātūra, the droppings of pigeons and kokilas, dvilatā, grīṣmasundara, guḍūcī, haṃsapādī, haridrā, haritakī, hastisuṇḍī, indravāruṇī, hiṅgumākṣika (an inorganic substance), kākajañghā, kākamācī, kañcukī, khāpara (an inorganic substance), kṣīrīṇī, kumbhī, kutumbaka, mācīkā, maṇḍūkapaṇī, mahārāṣṭrī, matsyākṣī, mṛgadūrvā, muṇḍī, mūrvā, muśālī, nāraṅga, pāṭhālī, puñkhā, raktacitraka, saindhava, śaṅkhapuṣpikā, sarpākṣī, śatāvārī, śigru, śikhiśikhā, somavallī, sūraṇa, svayambhuj, śvetārka, śvetavarṣābhū, tilapaṇikā, utpala, vajrakanda, vandhyā, varṣābhū, viṣṇukrāntā, vṛścikālī, vyāghrapādī, and yakṣalocanā (97–106).

Jāraṇa (111–195)⁹⁹ makes mercury lose its capalatra (fickleness) and renders it dīpta; several methods are described for the saṃskāra called jāraṇa; one of these renders mercury fit to digest abhṛaka (gaganagrāsapārada); purified abhṛaka and mercury are mixed and made into a compound substance; similar processes are described which make mercury digest iron, sulphur, manāṣīlāsattva, and khāparasattva; the way of preparing vaḍavānalaviḍa also forms part of the verses on jāraṇa; this substance, when rubbed with mercury, increases the latter's ability to digest abhṛaka; purified abhṛaka and mercury are mixed and made into a compound substance; similar processes are described which make mercury digest gold, iron, etc.; the section on jāraṇa ends with

the characterization of three varieties of this process, called garbhapara-, piṇḍa-, and pariṇāmajāraṇa. The saṃskāra called bandhana (196–206)¹⁰⁰ results in siddharasa, a substance with wonderful properties, suitable to achieve deha- and lohavedha. Sāraṇa (207–210) results in changing the baddharasa into a raktakhoṭa. Māraṇa (211–214) consists in subjecting the raktakhoṭa to intense heat, pratisāraṇa (215) in pulverizing the substance obtained by heating, and krāmaṇa (215) in mixing the powder with mṛtanāga (killed lead) and mṛtakāñcana (killed gold). Vedha (217–218) endows mercury with the ability of transforming base metals into gold. Udghātana (219–233) produces a substance that cures all diseases. This final product is called śṛṅghalārasa.

Chapter two describes the preparation of hemarājī, (ayaḥ)prakāśarājī, ghoṣarājī (= kāmasyarājī), mākṣikarājī, and nāgarājī (224–242). The six lohas of chapters five and six are hemaṇa (gold), kāntaloḥa (iron), rūpya (silver), vaṅga (tin), nāga (lead) and tāma (copper) (260–261). The māraṇa of these six lohas is achieved by means of nāga, hiṅgula, tilamākṣika,¹⁰¹ haritāla, manāṣīlā and śuddhagandhaka respectively (270–271). The model of lohamāraṇa is tāmmāraṇa (272–275). Gandhakataila (335–339) is necessary for the making of artificial gold (hemakarāṇa, 340–357). The same applies to vārigandhakajahr̥tipīṭhī or gandhakadrutīpīṭhī (358–374). Tālaka, also called godantī (375), is, after being purified, described as a medicinal substance which cures the eighteen varieties of kuṣṭha and rejuvenates the whole body (402–403). Abhṛakadruti is employed for the purposes of deha- and lohasiddhi (427–438). Effects of a rasāyana type are attributed to the bhasman of gold, the bhasman of diamonds, and the essence of bhūnāgas (439–458). The rules to be observed in order to profit from the thrice eighty-four guṭikās, añjanas and mercurial preparations devised by Kaṅkālāyayogin are expounded (459–464). Finally, the preparation of bālavādinī-guṭikā is described (465–478), a pill that endows a person, if used in the prescribed way, with the knowledge of the three divisions of time.

The *Rasādhyāya* contains a large number of unusual technical terms and names of substances, the meaning of which is not always clear. Many of these terms betray the influence of the author's mother tongue, which was a form of Hindī.

Noteworthy names of plants are: āsandhi (39, commentary), bhūmimardakī (292), bīyā (37), brahmaghnī (102), dūdhilī (43),¹⁰² hemapadī (144), hemavallī (328), jāri (144), jhījaraṭa (87), kudhya (40), mahodāka (197), mukhā ulī (317), nāhī (40), naṭī (144), pātālagurutman (371),¹⁰³ pāṭhālī (99), svayambhuj (103), vajrakañcukī (93), vyāghramadanakodrava (404), and vyāghrapadī (103).

Noteworthy technical terms and names of inorganic substances are: agniṣṭa (314; 322),¹⁰⁴ bavvera (147), bundha (52),¹⁰⁵ bundhaka (52; 54), cātikā (385),¹⁰⁶ chāṇṭayati (300),¹⁰⁷ citrakūṭa(mṛttikā) (226), dāghīcheda (166), dāthara (321),¹⁰⁸ dhāṅkaṇī (198; 228),¹⁰⁹ galadghaṭī (196),¹¹⁰ ghūrmāra (382),¹¹¹ iṅgāla (418; 433),¹¹² jaraṭīśa (439), jīkaka (32; 162),¹¹³ kacūla (245),¹¹⁴ kaṇayārī (250),¹¹⁵ karṣa (323),¹¹⁶ kulhaḍī (70; 71; 72),¹¹⁷ kumpa (90; 389),¹¹⁸ kuṇḍalikā (323),¹¹⁹ mecaka (420),¹²⁰ nisāhā (280), nesahiṅgu (283; 285), pallikāpīṭhī (410),¹²¹ pañcamṛttikā (162),¹²² phāḍī (229; 230),¹²³ phullatūrikā (61),¹²⁴ pīṭhī (52; 326; 329; 395),¹²⁵ rāba (305),¹²⁶ rantī (325; 326), sauvarṇaka (314),¹²⁷ thauhara (299),¹²⁸ thūthā (148),¹²⁹ vaḍhavāika (280), and vedhaṇī (217).

The *Rasādhyāya* is quoted in Guṛārjāsarmamiśra's *Viśikhānupraveśavijñāna* and Hariśaraṇānanda's *Kūpīpakvarasanirmānavijñāna*.

A Hindī adaptation of the treatise, by a courtier of Nasir-ud-Dīn Khalīj of Mālwa, is said to date from the beginning of the sixteenth century.¹³⁰ This *Nāśirasāhī Kaikāligantha*,¹³¹ written in an odd mixture of Sanskrit and Hindī, quotes Bhāskara, the *Bhāvaprakāśa*, and the *Rasapradīpa*.¹³² The quotation from the *Bhāvaprakāśa*, if genuine, would indicate that it is later than the sixteenth century.¹³³

The author

Information on the author of the *Rasādhyāya* is found at the end of the work. The author calls himself Campaka.¹³⁴ This Campaka and his brother, Manāgajākaukila, were the sons of Bhādiga,¹³⁵ who was a son of Mahipa¹³⁶ and a grandson of Mūñjāladeva Rāula of Yādavavamśa.

The *Rasādhyāya* is sometimes ascribed to a Merutuṅga, considered to be the well-known Jain author of the *Prabandhacintāmaṇi*.¹³⁷ One of the MSS credits Kaikālayogin with the text and Puruṣottama Sūri with the commentary.¹³⁸

The commentary on the *Rasādhyāya* is sometimes supposed to have been written by Campaka himself,¹³⁹ a view that is due to the incomplete MSS on which the edition is based.¹⁴⁰ The Berlin MS of the *Rasādhyāya* and its commentary¹⁴¹ mentions in its complete colophons Campaka as the author of the *Rasādhyāya*, and Merutuṅga, pupil of Mahendraprabha Sūri of the Añcalagaccha,¹⁴² as the author of the commentary (vṛtti). A *Rasāyanaprakaraṇa* by Merutuṅga, composed in A.D. 1387,¹⁴³ may be identical with the vṛtti on the *Rasādhyāya*.¹⁴⁴

Date

The dates of Kaikālayogin and Campaka are unknown.¹⁴⁵ The Berlin MS of the *Rasādhyāya* with Merutuṅga's commentary was completed in Śrīpattana in A.D. 1386/87,¹⁴⁶ which would imply that this Merutuṅga was not the author of the *Prabandhacintāmaṇi*, a work that was completed in A.D. 1306.¹⁴⁷ The Merutuṅga of the Añcalagaccha, who studied under Mahendraprabha Sūri, became a Sūri in A.D. 1472 and lived till 1527,¹⁴⁸ which conflicts with the date of the Berlin MS of the vṛtti.¹⁴⁹

The *Rasahṛdayatantra*

The *Rasahṛdayatantra* of Govinda¹⁵⁰ is an acclaimed treatise, exclusively dealing with the processing of mercury for the purposes of loha- and dehasiddhi.

Contents¹⁵¹

The *Rasahṛdaya* consists of 506 verses in āryā metre, arranged in nineteen chapters (avabodha).¹⁵² The titles of the chapters are: (1) rasaprasaṃsā (34 verses); (2) rasaśodhana (13 verses); (3) abhrakacāraṇa (26 verses); (4) abhrakasattvacāraṇa (26 verses); (5) garbhadruti (58 verses); (6) bījādjāraṇa (19 verses); (7) biḍa (9 verses); (8) rasarañjana (19 verses); (9) bījavidhāna (16 verses); (10) sattvapātana (17 verses); (11) bījanirvāhaṇa (13 verses); (12) dvandvamelana (12 verses); (13)

saṃkarabījavidhāna (8 verses); (14) saṃkarabījajāraṇa (18 verses); (15) bāhyadruti (16 verses); (16) sāraṇa (36 verses); (17) krāmaṇa (8 verses); (18) vedha (76 verses); (19) bhakṣaṇa (80 verses).

Chapter one¹⁵³ is in praise of mercury, which abolishes afflictions when murchita, leads to final emancipation (mukti) when subjected to bandha, and bestows immortality when mṛta (3); it even cures all diseases which are regarded as incurable (4). Those regularly using mercurial preparations acquire an immortal body (sthira-deha), the eight siddhis and the brahmapada (15).¹⁵⁴ The whole chapter consists of verses extolling the wonderful effects of mercury. The names and mythical origin of mercury are not described.

Chapter two lists the eighteen saṃskāras: svedana, mardana, murchā, utthāpana, pātana, nirodha, niyama, dīpana, gaganagrāsapramāṇa, cāraṇa, garbhadruti, bāhyadruti, jāraṇa, rāga, sāraṇa, krāmaṇa, vedha, and bhakṣaṇa (1–2).¹⁵⁵ One method for each of the first eight saṃskāras is described (3–11). Three naisargikadoṣas are mentioned: mala, śikhin (= agni) and viṣa, leading to murchā, dāha and death respectively (5). The kañcukas are not enumerated and only referred to as nāga- and vañgadoṣa in the verse on pātana (8); a ṣaṇḍadoṣa is mentioned in the verse on śodhana (9). The term sṛṣṭi is explained by the commentator as consisting of the urine, semen and blood of cattle, sheep, goats or human beings (9).¹⁵⁶ Subjection to the eight saṃskāras described makes mercury suitable to the next processes (10).

Chapter three is about the process that prepares abhraka (mica) for its combination with mercury (abhrakacāraṇa); this amalgamation of mercury and mica is a prerequisite for the process called pakṣaccheda (3). The preparation of crude mica is achieved by a process called jāraṇa (4), which makes it pure and devoid of its lustre (niścandrika; 5).¹⁵⁷ Two varieties of cāraṇa are described: nirmukha- and samukhacāraṇa (5–7 and 12); samukhacāraṇa is one of the steps leading to the making of artificial gold and silver. Three other varieties, characterized by the relative quantities of mercury and mica in the mixture, are called grāsa, piṣṭi and garbha (13). A number of methods for the cāraṇa of mercury and mica are given (16–19). Verse 20 introduces sulphur (gandhaka), which is necessary for giving colour (rāgadāyin) to mercury, for the jāraṇa of a bīja, the clipping of the wings (pakṣaccheda), and the bandha of mercury. A mixture of mica and sulphur, added to mercury, results in pakṣaccheda (21–23). The addition of hemapiṣṭi (= hemabhasman) is described in the next verses (24–25).

Chapter four is concerned with the extraction of the essence (sattvacāraṇa) of mica (abhraka). Four varieties of mica are mentioned: black, red and yellow in colour and one called vajrin (1);¹⁵⁸ the extraction of the sattva of abhraka is necessary because mercury does not amalgamate with mica itself (2); the essence of mica is the best substance to achieve the pakṣaccheda of mercury (3), a process that has to precede its bandha (4). The characteristics of pakṣacchinna mercury are described (5). The variety of abhraka called vajrin is the only one suitable to the extraction of the essence (sattva) (6–7). The products called kāca, kiṭṭa and pattrarajas, resulting from sattvapātana of the unsuitable varieties of abhraka, are useless in rasāyana preparations (8). Some methods of preparing abhrakasattva (9–11) and the characteristics of this product are described (12).¹⁵⁹ Methods to mix the sattva with mercury follow (13–20). Mixtures of

abhrasattva and other substances (copper, iron, etc.), which are employed in making mercury accept the sattva, are called śulbābhra, etc. (21).¹⁶⁰ Finally, the way to colour abhrakasattva and the cāraṇa of this product are described (23–24).

Chapter five describes garbhadruṭi (1–35) and bāhyadruti (36–58), processes which result in the liquefaction (druti) of the grāsa, i.e., the substances added to mercury. The substances necessary to achieve this liquefaction are called bīja. Chapter five opens with methods to prepare various bījas (4–23). Mākṣikasattva, for example, is necessary for the druti of gold and silver (7). Next, garbhadruṭi itself is described (24–26) and the preparation of biḍas (catalytic agents) helpful in the druti of gold and vaikrānta (27–29), followed by verses on the quantities of grāsa that can be digested by mercury, dependent on various circumstances (30–32), and related topics (33–35). The next subject is bāhyadruti; several methods are described to achieve the liquefaction of various substances.

Chapter six continues the same subject: jāraṇa of the bījas by means of druti. The characteristics of a successful jāraṇa are described (7) and the measures to be adopted when the jāraṇa is incomplete (8–10). Some definitions follow: the products called daṇḍadhārin, pāyasākāra, jalaukākāra, avipluṣa and chedin are described (11–12);¹⁶¹ the characteristics of abhrajārāsa are mentioned: dhūma, ciṭiṭiśabda, maṇḍūkagati, sakampa, niṣkampa (14).¹⁶² The kacchapayantra is described and jāraṇa by means of this apparatus (16–19).¹⁶³

Chapter seven is about biḍas, which are helpful in the process of jāraṇa of the bījas, especially of hemabīja (1–3), and about the preparation and use of kṣāra for the same purpose (4–9). The trees and plants suitable for the preparation of a kṣāra are enumerated: kadālī, palāśa, tila, nicula, kanaka, suradālī, vāstuka and eraṇḍa (4).

Chapter eight is concerned with the colouring of the product resulting from jāraṇa of a grāsa. Jāraṇa of abhraka gives the product the colour of the variety of abhraka that was used (1–2). Several other methods are described. The saṃskāra by means of which colouring (rañjana or kṣṛṣṭi) is achieved is called sārāṇa. A coloured mercurial product is able to transmit its colour to various metals (18).

Chapter nine opens with the statement that mercury, even after colouring, is not yet suitable to the karman (of the alchemist, i.e., auri- and argentifaction); the addition of a bīja is necessary to achieve this aim (1). Two types of bīja are distinguished: yellow and white (1), employed in the making of gold and silver respectively. The substances which are of importance in preparing a bīja are enumerated; the eight rasas: vaikrānta, kānta, sasyaka, mākṣika, vimāla, adri (= śilājatu), darada and rasaka (4);¹⁶⁴ the eight uparasas: gandhaka, gairika, (manah)śilā, (harit)āla, kṣiti (= sphatikā), khecara (= kāśīsa), añjana and kaṅkuṣṭha (5); the two sārālohas: śikhin (= gold) and śaśin (= silver) (5); the six pūtilohas: tāma, āra, tīkṣṇa, kānta, abhrasattva, loha (= muṇḍa), vaṅga and nāga; the six salts: sauvarcala, saindhava, cūlika, sāmudra, romaka and biḍa (7); the three alkalis (kṣāra): svarjī, taṅkaṇa, and yavakṣāra (7); a group of śodhana and drāvaṇa plants: sūryāvarta, kadālī, vandhyā, koṣṭāki, suradālī, śigru, vajrakanda, nīrakaṇā (= jalappipālī) and kākamācī (8). The plants mentioned are employed in the purification of the rasas and uparasas, and in the extraction of their sattva (9); the remaining part of the chapter (10–16) is about the purification of several of the substances mentioned.

Chapter ten is concerned with the extraction of the essence (sattvapātana) of several substances. It is necessary to extract the sattvas of vaikrānta, kānta, sasyaka, mākṣika, etc., because these essences can be assimilated, in contrast with the substances themselves. Candrodaka (2) and śailodaka (3) are referred to. The sattvas are described, together with their uses.

Chapter eleven deals with the nirvāhaṇa of the bījas, i.e., their transfer to the mercurial preparation, resulting in its colouring. Śrīkhalābīja is described (6–7).

Chapter twelve gives an account of the methods employed to achieve a thorough mixing of the bīja and the mercurial product (dvandvamelana).

Chapter thirteen describes the preparation of a saṃkarabīja (mixed bīja) or mahābīja, several varieties of which are distinguished. Sixty-four of these are referred to.¹⁶⁵

Chapter fourteen describes the digestion (jāraṇa) of these saṃkarabījas after adding them to the mercurial product. The māraṇa of mercury, leading to the product called kṛṣṭa, is also dealt with.

Chapter fifteen is about bāhyadruti and garbhadruṭi, which serve to stabilize the product after jāraṇa; this stabilization is called bandha.

Chapter sixteen is about sārāṇa, a process which renders the product obtained by means of the preceding processes capable of pervading base metals added and thus transmuting them. Sārāṇa is achieved by means of sārāṇatāila. The preparation of this oil is described, along with the instrument used, the sārāṇayantra (11–23).¹⁶⁶ Sārāṇa can also be carried out by means of the ḍamarukayantra (24–25). Pratisārāṇa and anusārāṇa are defined (30);¹⁶⁷ these varieties of sārāṇa increase the transmuting power (31–35).

Chapter seventeen gives an account of krāmaṇa, which results in the ingredients of the mixture pervading each other on an atomic level (1–2).

Chapter eighteen is about vedha, a process finally enabling the alchemist to transmute base metals into gold or silver (hemākṣṛṣṭi and tārkṣṛṣṭi).

Chapter nineteen describes the use of mercurial preparations for rasāyana purposes. The rules to be observed before the consumption of a mercurial product are given (2–15);¹⁶⁸ several mercurial products suitable to cure diseases, obtain longevity, or even render the body immortal are described (16–50). The mental state attained is described as rasānanda (49). The symptoms and treatment of the disorder called rasājirṇa are dealt with (51–58).¹⁶⁹ Some verses extol the wonderful effects of mercurial rasāyanas, which make one equal to Viṣṇu and Rudra (64). The chapter ends with the recipes for amarasundarī guṭikā (65–66), mṛtasamjīvanī guṭikā (67–72), vajrīṇī guṭikā (73–74), and khecaraguṭikā (75–76).

The treatise ends with information on the author.

Sources are not referred to.¹⁷⁰

The *Rasahrdaya* is quoted or referred to in the commentary on the *Aṣṭamahāmātrā*, Basava's *Śivatattvaratnākara*, the *Bhāvaprakāśa*,¹⁷¹ Cūḍāmaṇiśra's *Rasakāmadhenu*, the *Dharaṇīdharasamhitā*, Govindarāma Ṭhākura's *Rasasamgrahasiddhānta*, Guṇarājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hariprapanna's *Rasayogasāgara*, Hārīśaraṇānada's *Kūpīpakvarasanirmāṇavijñāna*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Khare's commentary on the *Rasaratnasamu-*

caya, Mādhavācārya's *Sarvadarśanasamgraha*,¹⁷² Nirāṅjanaprasāda Gupta's *Pārada-saṃhitā*, Nityanātha's *Rasaratnākara*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, Rāmacandra's *Rasendracintāmaṇi*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, Vāgbhaṭa's *Rasaratnasamuccaya*,¹⁷³ Viṣṇudeva's *Rasarājalaṅkā*, and Yādavjī Trikamjī's *Rasāmṛta*. The *Rasaḥṛdaya* was one of the sources of the *Āyurvedaprakāśa*, *Rasaratnasamuccaya* and *Rasendrasambhava*. A *Rasaḥṛd* is mentioned in the *Vaidyaśāstrapravartakācāryanāmasamuccaya*.

The author of the *Rasaḥṛdaya* is quoted in Guṇrājśarmamiśra's *Viśikhānupraveśavijñāna*¹⁷⁴ and Trimalla's *Bṛhadhyogatarāṅgiṇī*.¹⁷⁵ Bhagavadgovinda is mentioned as a source in Viṣṇudeva's *Rasarājalaṅkā*. Govinda is quoted in Guṇrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*. The author is referred to as Govinda in Khare's commentary on the *Rasaratnasamuccaya*, as (Bhagavad)govindapāda or -pādāḥ in the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Rasendracintāmaṇi*, the *bha-smapiṣṭiprakaraṇa* of the *Rasoddhātatantra*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*, as Govindabhagavant in the *Rasendracūḍāmaṇi*, and as Govindabhagavatpāda in the commentary on the *Rasatarāṅgiṇī* and in the *Sarvadarśanasamgraha*.

A Govinda, either the author of the *Rasaḥṛdaya* or the one who wrote the *Rasasāra*, is referred to as a source or quoted in Māṇikyadeva's *Rasaratnasamuccaya*, Rāmarāja's *Rasaratnapradīpa*, the *Rasakakṣāpuṭa*, and the *Rasakaḥṇa*.

A Govinda, who cannot be but the author of the *Rasaḥṛdaya*, is mentioned in the *Rasasāra*.¹⁷⁶

The *Rasaratnākara* (Vādikhaṇḍa), *Rasaratnasamuccaya* and *Rasatarāṅgiṇī* mention Govinda as one of the *Rasasiddhas*.

The author¹⁷⁷

The last verses of the *Rasaḥṛdaya* (19.78–80) contain some information on the author, who calls himself bhikṣu Govinda.¹⁷⁸ The author mentions as his patron king Madana,¹⁷⁹ an alchemist (rasācārya) himself, the lord of the *Kirātas*,¹⁸⁰ of Somavaṃśa¹⁸¹ and Haihaya kula.¹⁸² D.G. White is inclined to locate Govinda's Haihaya king Madana, lord of the *Kirātas*, at the eastern extremity (eastern Madhya Pradesh, Orissa) of the sphere of influence of the Kalachuri kings, who traced their lineage back through Haihaya and Yadu to the Moon and therefore considered themselves to belong to the Lunar dynasty (somavaṃśa).¹⁸³

One of the MSS has an additional verse containing the names of Govinda's father, Maṅgalaviṣṇu, and grandfather, Sumanaviṣṇu.¹⁸⁴

Bhikṣu Govinda is by some regarded as a Buddhist, by others as a Hindu.¹⁸⁵ The view that he was a Buddhist rests on very slender evidence, consisting of a reference to the Tathāgata in the additional verse of one of the MSS.¹⁸⁶ The references to Hinduism in the body of the text clearly indicate that Govinda was a Hindu by faith.¹⁸⁷

Date

Tryambaka Kāle identified bhikṣu Govinda with the Govindabhagavatpādācārya who was the teacher of Śaṃkarācārya.¹⁸⁸ This identification was based on the resemblance, with regard to meaning, of an āryā of the *Rasaḥṛdaya* (1.30) and a verse in one of the works of Śaṃkara,¹⁸⁹ and on references to the author of the *Rasaḥṛdaya* as Govinda-bhagavatpādācārya in the *Sarvadarśanasamgraha*.¹⁹⁰ Kāle's hypothesis is rejected by part of the later authors on the subject,¹⁹¹ because it would place the composition of the *Rasaḥṛdaya* in the last part of the eighth or the beginning of the ninth century, an age in which alchemy had not yet developed to the stage represented by the *Rasaḥṛdaya*.

Kāle also claimed that Govinda's patron, Madana, is identical with a king Kāmadeva, who is mentioned in the *vaṃśāvalī* of the Haihayakula;¹⁹² this king is assigned to the eighth century, which would fit in with the view that the author of the *Rasaḥṛdaya* and Śaṃkara's guru are one and the same person.

Kāle's assumptions regarding the identities of Govinda and Madana are arbitrary and unconvincing. The *Rasaḥṛdayatantra* cannot possibly date from the late eighth or early ninth century on account of the much more developed state of rasaśāstra in this work, compared with what is found in the works of Vṛnda, Cakrapāṇidatta and Vaṅgasena. The similarities between the *Rasaḥṛdaya* on the one hand and the *Rasārṇava* and *Rasendracintāmaṇi* on the other suggest that these three works were composed in about the same period.¹⁹³ D.G. White is of the opinion that the tenth or eleventh century is a plausible date for Govinda's work, in the light of the dates of later treatises that refer back to it.¹⁹⁴

The lower limit is provided by the quotations in the *Rasarājalaṅkā* (dating from the third quarter of the thirteenth century), *Rasendracūḍāmaṇi*, and *Sarvadarśanasamgraha* (dating from the second half of the fourteenth century).

A commentary on the *Rasaḥṛdayatantra*, called *Mugdhāvaḥbodhinī*,¹⁹⁵ was written by Caturbhujamiśra.¹⁹⁶

Authorities and works quoted or referred to in this commentary are: Amara (1.14; 4.24; 11.8; 12.4; 19.23, 36, 61), *Anekārtha* (1.1 and 2), Bhagavadvacana (1.23 and 25), *granthāntara* (1.29–30; 3.5; 4.1, 8, 12; 5.7; 14.2; 19.38, 44, 46, 65–66), *guru vacanam* (1.10), Haima (16.5), *Haṭhapradīpikā*¹⁹⁷ (1.21), *Hitopadeśa* (1.6), *Mādhavanidāna* (10.3), *Mañjarī* (1.1; 3.19),¹⁹⁸ *Nyāyaśāstra* (1.24), *paribhāṣā* (2.3, 4, 13; 6.19; 8.1; 9.1; 16.1; 18.1), *Praśnottararatnamālā* (1.15),¹⁹⁹ *Rasamañjarī* (1.2 and 3), *Rasaratnākara* (1.1, 2, 3, 6), *Rasasaṃketakalikā* (2.5), *Rasasāra* (2.6), *Rasāvatāra* (1.11), *Rasendramaṅgala* (1.3 and 5; 2.3 and 5), *Śaktyavatāra* (2.9), *Samketakalikā*²⁰⁰ (1.3), *śruti* (1.1 and 23), *Sūtra* (1.7 and 13),²⁰¹ *Vedāntasūtra* (1.9), *vedāntavacana* (3.28), and *Vidagdhamukhamāṇḍana* (1.3).²⁰²

Caturbhujā gives, from an unknown source, the following list of *Rasasiddhas*: Āllama,²⁰³ Bhāluki, Bindunātha,²⁰⁴ Carpaṇi, Gaja,²⁰⁵ Ghoḍācolī,²⁰⁶ Kākacaṇḍiśvara, Kaṇeri,²⁰⁷ Kaṇṭhaḍi,²⁰⁸ Kāpālika, Kāpālin, Khaṇḍin,²⁰⁹ Korāṇṭaka,²¹⁰ Manthāna-bhairava, Nāgadeva,²¹¹ Nirāṅjana,²¹² Nityanātha, Prabhudeva,²¹³ Pūjyapāda,²¹⁴ Siddhabuddha,²¹⁵ Siddhapāda,²¹⁶ Surānanda, Thīṇṭhinī,²¹⁷ and Yogin²¹⁸ (ad 1.7).²¹⁹

A long list of vāsanaśādhis is found in the comments ad 3.4. This list mentions:²²⁰

abhracandrā,²²¹ ahilocanā, aṃamārī, alambuṣā, aparājītā, apatṛā, bṛhatī, caṇakāyāsī, citraparṇī, dantī, dhānyā, garuḍī, gojihvikā, halinī, haṃsapādī, hemaṇṣupikā, īśvarī, jalacakorī, jalajā utpalī, jalamūlaka, jalapippalī, jalapūrvāmbusūtā,²²² jālinī, jalodbhāvāpāmārga, kapotī, kapotikī, kṣīrikā, kumārī, kumbhikā, kurkurī, lavaṇā, māṃsī, māṇḍūkī, mārjārapādikā, meghanādā, meṣikā, mīnākṣī, mohinī, mūrti, muśālī, nāginī, nandinī, pāṣāṇabhedikā, prasārīnī, rasacandraukasa,²²³ sārīvā, sarpasugandhikā, śikhā, śikhipādī, sitajāṅghā, sīhalajā padmā, śukanādā, svara, triparṇikā, tulasī, ugrā, upāmbu, uttamā, vajrakandaka, vanamālā, vanārjakā, varāhī,²²⁴ vāribhūtā samaṅgā,²²⁵ vāyāsī, vidārī, vṛddhā, vṛścikālikā, and yavacīcā.²²⁶

Outstanding (Rasa)siddhas referred to are Nityanātha (3.17; 5.36; 19.77) and Vīranātha (3.17).²²⁷ Nāgārjuna is mentioned as a Yogīndra (19.70).

Caturbhujā's commentary abounds in anonymous quotations.²²⁸ He mentions variants of Govinda's text²²⁹ and gives vernacular equivalents for the names of some substances.²³⁰

Jasavanta Siṃha, who wrote a Hindī commentary on the *Rasaḥṛdaya*, regards Caturbhujā as one who had no first-hand knowledge of alchemy; he highlights a number of obviously wrong interpretations.²³¹

Caturbhujā is quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*. The commentary on the *Rasaḥṛdaya* is cited in Hariśaraṇānanda's *Kūpīpa-kvarasanirmāṇavijñāna*, Khare's commentary on the *Rasaratnasamuccaya*, and the *Rasatattvavivecana*.

Caturbhujā mentions in the introductory verses of his commentary that he was a grandson of Hariharamiśra of Kuralakula and a son of Maheśa; he was a brāhmaṇa of Khaṇḍelavāla lineage. Descendants of this lineage live in Jaypur, Bikaner, and adjacent regions.²³²

This information proves that the commentator on the *Rasaḥṛdaya* is distinct from the Caturbhujā who was the father of Śivadatta, who wrote the *Śivakośa*.²³³

Caturbhujā's quotations from Cāmuṇḍa's *Rasasaṃketakalikā* and Śrīśailanātha's *Praśnottararatnamālā* indicate that he cannot be earlier than the sixteenth century.

A *Rasakalpadruma*, which may or may not be a work on rasaśāstra, is attributed to a Caturbhujā.²³⁴ A treatise called *Aṣṭādaśasaṃskārāḥ* by a Caturbhujā is classified as a work on dharmasāstra.²³⁵ Rāmānanda, the author of a ṭīkā on the *Kāśīkhaṇḍa* of the *Skandapurāṇa*, was a pupil of a Caturbhujā.²³⁶

Chapter 5 Rasajalanidhi

The *Rasajalanidhi* by Bhūdeva Devaśarman (Bhudeb Mookerji)¹ is an extensive work in Sanskrit verse and prose, accompanied by an English translation, on all the aspects of alchemy and iatrochemistry.

Contents

Volume I consists of eight chapters, preceded by a maṅgala.

Chapter one (rasasādhanaśāstra; 6–17) deals with the qualifications of a teacher and his disciple, the construction of the laboratory (rasaśālā), the rasaliṅga and its worship, and the equipment (upakaraṇāni) of the laboratory. Chapter two (śiṣyopanayana; 18–26) is on the initiation of a student. Chapter three (rasaprasaṅga; 27–36) begins with a eulogy of mercury, followed by verses on the various kinds of mercury and the meaning of its names.

Chapter four (pāradaprasaṅga; 7–220) deals with the blemishes of mercury (7–8), the eighteen saṃskāras (39–40), śodhana (40–51), svedana (51–53), mardana (54–56), uddhṛti (56–57),² ūrdhvapātana (57–60), adhaḥpātana (60–61), adhaḥpātana followed by ūrdhvapātana (61–63), tiryakpātana (63), rodhana or nirodha (63–66), niyāmana (66–69), dīpana (69–71), anuvāsana (71), the plants called rasamūlikā (72–73), two easy ways of complete purification of mercury (73–75), grāsana (75–93; verses on the preparation of viḍas³ and a viḍavaṭī form part of this section), gandhakajāraṇa (94–98), abhrakasattvajāraṇa (98–99), mūrchanā (99–126; the preparation of rasasindūra, rasakarpūra, pītarasa, kṛṣṇarasa, parpaṭīrasa, rasatālaka, makaradhvaja, and svarṇasindūra forms part of this section), bandhana (126–129), saṃcāraṇa (129–130), garbhadruti (130–132), jāraṇa (132–142; related subjects dealt with are the vajramūṣā, viḍas, and a viḍavaṭī), grāsamāna (140–141), māraṇa (142–156), bhasmīkaraṇa (156–176), the medicinal uses of mercurial ashes (bhasman) and the anupānas to be taken (176–190), a few rasayogas (190–192: vajrapañjarasa, pañcāmṛta), the regimen that precedes the taking of mercurial preparations (192–195: kṣetrīkaraṇa), rules accompanying their use (195–205), the disorders resulting from improper use of mercury and the treatment of these disorders (205–213), niyāmaka plants (214), the plants called mūlikā (215–217), and plants and substances used in the killing (māraṇa) of mercury (217–220).

Chapter five (rasarañjana; 221–249) is concerned with the processes called rañjana (221–222), sāraṇā (222–236), saṃkrāmaṇa (236), and vedhana (237–249). Chapter six (yantrāṇi; 250–298) describes yantras and koṣṭhikās (250–285), crucibles (mūṣā; 285–

293), and *puṭas* (293–298). Chapter seven (299–320) contains a series of definitions (*paribhāṣā*; 299–309), followed by verses on weights and measures (309–311). The second part of the chapter is devoted to the *bandhas* of mercury (311–320). Chapter eight (321–350) describes methods of making gold and silver; it ends with some verses on the bleaching (*śvetikaraṇa*) of copper.

Volume II consists of four chapters, preceded by a *maṅgala*. Chapters one to three are about the *uparasas*, chapter four deals with some of the metals.

Chapter one (2–129) begins with an enumeration of the *uparasas*, divided into three groups: (a) substances to be purified and killed: *vajrābhra*, the two kinds of *mākṣika*, *vimala*, *śilājatu*, *tutthaka*, *sasyaka*, *capala*, and *rasaka*; (b) substances used in mercurial operations: *gandha*, *gairika*, *kāsisa*, *kāṅkṣī*, *tāla*, *śilā*, *añjana*, and *kaṅkuṣṭha*; (c) substances having some properties in common with mercury and therefore called *sādhāraṇarasas*: *kampilla*, *gaurīpāṣāṇa*, *navasāraka*, *kaparda*, *vahnijāra*, *girisindūra*, *hiṅgula*, *mṛddāraśṅga*, and *bhūnāga*.

The subjects of chapter one are: mica (*abhraka*), its four usual varieties, its purification, the preparation of *dhānyābhra*, the killing of mica, the *amṛtikaraṇa* of the ashes, plants and some substances employed in the killing of mica, the medicinal uses of the ashes of mica, the extraction of the essence, its purification and killing, the softening (*mṛdūkaraṇa*) of essences, the liquefaction (*druti*) of mica, the transmutation (*vedha*) of base metals by means of mica (3–60); the varieties, purification, killing, the extraction of the essence, etc., of *mākṣika* (61–77), *vimala* (77–83), *śilājatu* (83–104), *tuttha* (104–110), *sasyaka* (110–115), *capala* (115–118), and *rasaka* or *kharpara* (118–129).

The subjects of chapter two (130–210) are: sulphur (*gandhaka*), its varieties, purification, the uses of purified sulphur, the preparation of *gandhakataila*, the removal of the bad smell, and the transmutation of metals by means of sulphur (130–149); the varieties, purification, the extraction of the essence, and medicinal uses of *gairika* (146–149), *kāsisa* (149–152), *kāṅkṣī* or *tuvarī* (152–154), *haritāla* (155–196), *manahśilā* (196–201), *añjana* (201–207), and *kaṅkuṣṭha* (207–210).

The subjects of chapter three (211–236) are: *kampilla* and its purification; the purification of *sādhāraṇarasas* in general (211–212); the purification, etc., of *gaurīpāṣāṇa* (213–214), *navasāra* (214–216), *varāṭikā* or *kapardī* (216–219), *śaṅkha* (219–221), *agnijāra* (221–222), *girisindūra* (222–224), *hiṅgula* (*cinnabar*) (224–233), *mṛddāraśṅga* (233–234), and *bhūnāgas* (234–236).

Chapter four (237–288) is concerned with gold, silver and copper. The chapter begins with an enumeration of the seven metals (*dhātu*, *loha*): gold, silver, copper, iron, zinc, tin and lead, and the three alloys (*miśraloha*): *pittala*, *kāṁsya* and *varṭaka*. The subjects of chapter four are: the varieties and properties, purification, killing, etc., of gold (237–259), silver (259–273), and copper (273–288).

Volume III is divided into eleven chapters.

Chapter one, preceded by a *maṅgala*, is devoted to iron and *maṇḍūra* (3–95). Its subjects are: the properties of iron, its seven natural blemishes, its varieties, purifica-

tion, killing (*bhānupāka*, *sthālīpāka*, *puṭapāka* are also dealt with; the items of a number of *gaṇas* are enumerated), *nirutthīkaraṇa* and *amṛtikaraṇa* of the ashes, the uses of the ashes, liquefaction of iron (3–91); *maṇḍūra*, its properties, varieties and uses, its purification and liquefaction (91–95).

Chapter two (96–140) is devoted to the varieties, properties, purification, killing, etc., of zinc (96–101), tin (101–120), and lead (120–140).

The subjects of chapter three (140–158) are: the three alloys, their purification and killing (140–152); *triloha*, its purification, killing and uses (152–153); the extraction of the essence of *bhūnāga* and the uses of this essence (*kharasattva*; 153–157).

Chapter four (159–259) is devoted to the *ratnas* and *uparatnas* (precious and semi-precious stones). Sixteen *ratnas* are enumerated: *vajra* (diamond), *marakata* (emerald), *māṇikya* (ruby), *mauktika* (pearl), *nīlmaṇi* (sapphire), *gomeda* (zircon), *vaidūrya* (cat's eye), *dagdhahīraka* or *vaikrānta* (garnet), *sphaṭika* (quartz), *candrakānta* (moonstone), *sūryakānta* (sunstone), *pravālaka* (coral), *karketa* (chrysoberyl), *puṣparāga* (topaz), *rājāvarta* (lapis lazuli), and *bhīṣmaka* (a kind of quartz); seven *uparatnas* are mentioned: *pālaṅka* (onyx), *rudhira* (carnelian), *pūti(kā)* or *putrikā* (peridot), *tārkaṣa* (turquoise), *pīlu* (jade), *upala* (opal, chalcedony and agate), and *sugandhika* (spinel) (159–160).

The subjects dealt with are: diamonds, their classification, characteristics, blemishes, purification, killing, etc. (163–187), the purification and killing of gems in general (188–195), *marakata* (196–201), *māṇikya* (201–209), pearls (209–217), *nīla* (217–220), *gomeda* (220–223), *vaidūrya* (223–226), *vaikrānta* (226–235), *sphaṭika* (235–237), *candrakānta* and *sūryakānta* (238–239), *pravāla* (240–242), *karketa* (242–244), *puṣparāga* (245–248), *rājāvarta* (248–251), *bhīṣmaka* or *bhīṣmamaṇi* (251–252), and the *uparatnas* (252–259).

Chapter five (260–282) deals with groups of alkaline substances (*kṣāra*), their sources, general properties, *yavakṣāra*, *ūṣara*, *miśrakṣāra*, *svarjikṣāra*, *ṭaṅkaṇa*, the uses of *kṣāra*, the preparation of *kṣāra*, more groups of *kṣāras*.

Chapter six (283–291) is about salts (*lavaṇa*); six types are distinguished: *sāmudra*, *saindhava*, *viḍa*, *sauvarcala*, *romaka*, and *cūlikālavaṇa*.

Chapter seven (292–329) describes poisonous substances (*viṣa*). Ten sources of *sthāvaraviṣa* (poisons of vegetable origin and inorganic substances) are distinguished: roots, leaves, fruits, flowers, barks, milky juices, woods, exudates (*niryāsa*), tubers, and metals. The usual eighteen poisonous tubers are enumerated and described (292–303).⁴ The eight tuber poisons that may be used for medicinal purposes are divided into *brāhmaṇa*, *kṣatriya*, *vaiśya* and *śūdra* types. The disorders caused by poisonous substances and the treatment of these disorders are dealt with. The purification and killing of tuber poisons are described, followed by rules about the medicinal uses of poisonous substances. The chapter ends with poisons of animal origin, especially snake venom.

Chapter eight (330–360) gives an account of the minor poisons (*upaviṣa*), their purification and uses (330–351); the thirteen minor poisons (of vegetable origin) are: *snuhī*, *arka*, *lāṅgalī*, *guñjā*, *karavīra*, *viṣamuṣṭi*, *dhattūra*, *jayapāla*, *bhallātaka*, *nirviśā*, *ataviṣa*, *ahipheṇa*, and *jayā* (= *bhaṅgā*).⁵ The second part of the chapter is concerned

with the treatment of disorders caused by upaviṣas (351–357), the purification of a number of seeds, guggulu, and leeches (357–360).

Chapter nine (361–369) is about the extraction of oil (tailapātana) from a number of seeds.

Chapter ten (370–383) describes fermented fluids (saṃdhāna), which are divided into three groups: (1) alcoholic, (2) non-alcoholic, medicated, (3) non-alcoholic and non-medicated. The first group (madya) consists of gauḍī, mādhvī, paṣṭī, kādambarī, vāruṇī, mādhuḥkī, maireyī, and mārīvika; the second group consists of the āsavas and ariṣṭas; the third group consists of sīdhu, śukta, dhānyāmla, kāñjika, guḍaśukta, cukra, tuṣāmbu, sauvīra, āranāla, and śiṇḍāḥkī.

Chapter eleven (384–390) contains definitions of śulvanāga, varaloha, ghoṣā-kṛṣṭatāmra, varanāga, cullakā, pataṅgirāga, āvāpa, abhiṣeka, nirvāpa, śuddhāvarta, bijāvarta, svāṅgaśīṭala, and bahiṣṭī. The chapter ends with a list of thirty-seven Rasasiddhas.

Volume IV consists of six chapters, preceded by a maṅgala and prayer to the author's iṣṭadeva.

Chapter one (3–35) is about rules regarding diet and behaviour, followed by general rules about the taking of medicines, in particular rasayogas. Chapters two to six deal with a number of diseases, their aetiology, symptoms and treatment, in particular the treatment with rasas.

Volume V begins with a maṅgala again, followed by a large number of adhikāras, devoted to the aetiology, symptoms and treatment, in particular the treatment with rasas, of many diseases.

Authorities, referred to in the *Rasajalanidhi*, are: Ādima (III, 65),⁶ Bhāluki (II, 207), Brahmajyotiṣ (III, 181),⁷ Candrasena (III, 183⁸ and 245),⁹ Nandin (I, 265 and 271; II, 147), Lakṣmīśvara (II, 245),¹⁰ Rāmacandra (III, 4–5),¹¹ Śāmbhu (I, 280), Somadeva (III, 156),¹² Śukra (III, 65),¹³ and Suśruta (III, 279).

The list of thirty-seven Rasasiddhas (III, 389–390) consists of: Ādima, Ananta-devasūri,¹⁴ Bhāskara, Bhūdeva,¹⁵ Brahmā, Brahmajyotiṣ,¹⁶ Candrasena, Daṇḍin,¹⁷ Gomukha, Govinda, Hari, Indrada, Kambali, Kāpālīka, Kapālin, Khaṇḍa, Lambaka, Laṅkeśa, Māṇḍavya, Manthānabhairava, Matta, Nāgabodhi, Nāgārjuna, Nandirāja, Naravāhana, Nityanātha,¹⁸ Rāma,¹⁹ Ratnakośa, Śāmbhu, Sāitvika, Somadeva,²⁰ Śukrācārya,²¹ Surānanda, Śūrasenaka, Vāgbhaṭa,²² Vyāḍi, and Yaśodhara.

Apart from the authorities referred to, sources are not indicated by the author. Some of the texts from which verses were borrowed are: *Rasacintāmaṇi*,²³ *Rasaratna*,²⁴ *Rasaratnākara*,²⁵ *Rasaratnasamuccaya*,²⁶ *Rasārṇava*,²⁷ *Rasasāra*,²⁸ *Rasendra-cintāmaṇi*,²⁹ *Rasendracūdāmaṇi*,³⁰ and *Rasendrasārasaṃgraha*.³¹

The *Rasajalanidhi* is one of the sources of the *Rasavidyāmahārṇava*.

Hariprapanna is mentioned in Hazārīlāl Sukul's commentary on the *Rasaratna-samuccaya*.

Special features

The eighteen saṃskāras are: śodhana, svedana, mardana, uddhṛti, pātana, rodhana, niyāmana, dīpana, anuvāsana, grāsana, mūrchana, saṃcāraṇa, garbhadruti, jāraṇa, māraṇa, bhaṣmīkaraṇa, rañjana, and vedhana (I, 39).³² A type of vedha, added to those borrowed from the *Rasendracūdāmaṇi* (4.107cd–111), is sparśavedha (I, 248–249).

The svedanī- and kandukayantra are regarded as identical (I, 251).³³ The same applies to the vidyādhara- and pātānayantra (I, 251–252).³⁴ Yantras added to the series found in the *Rasaratnasamuccaya* are: khalacārīyantra (I, 268), jālayantra (I, 272–273), ṭaṅkaṇayantra (I, 279), pātālayantra (I, 279–280), tejayantra (I, 280), gaurīyantra (I, 282), cakrayantra (I, 283), nāḍikāyantra (I, 284), and vāruṇīyantra (I, 285). The hiṅgulākṛṣṭīyantra and valabhīyantra of the *Rasaratnasamuccaya* are absent.

Two series of plants and some other substances which are helpful in killing mica are enumerated (II, 29 and 37).

Mākṣika is said to be found along the river Tāpī, in Kirāta, Cīna and Kānyakubja (II, 61); three varieties are mentioned: svarṇamākṣika, yellow in colour, vimāla, red in colour, and tāramākṣika, white in colour; dependent on its shape, four varieties are distinguished (II, 62–63).

A kind of copper, called nāgatāmra, can be extracted from peacock's feathers; a ring, made from this material, cures śūla and overcomes all sorts of poison (II, 108–110).

Four varieties of kāśīsa are described: (a) vālūkākāśīsa, white in colour; (b) puṣpa- or padmakāśīsa, yellow in colour; (c) dhātu- or muktakāśīsa, black in colour; (d) a green variety (II, 149–150). Two varieties of kāṅkṣī, tuvarī or saurāṣṭrī are distinguished: pītikā and phullikā or phullatuvarī; gopīcandana is one of the names of kāṅkṣī (II, 152); the essence of tuvarī is called sphaṭikā (II, 154). Haritāla is of four kinds: patra- and piṇḍaharītāla, godanta, vakadāla (II, 155). Manahśīlā is of three kinds: śyā-māṅgī, kaṇavīrakā and khaṇḍākhya (II, 196). Añjana is of six kinds: sauvīrāñjana, nī-lāñjana, rasāñjana, sroto'ñjana, kulatthāñjana and puṣpāñjana (II, 201); three types of rasāñjana are distinguished (II, 203). Gaurīpāṣāṇa is also called dārumūṣaka, mūṣaka and sambala; a red, yellow and white variety are distinguished (II, 213). A varāṭī or kapardī is killed by means of an apparatus called pāṇikāyantra (II, 219). Girisindūra is regarded as an upadhātu of lead; two varieties are distinguished: girisindūra and nā-gasindūra (II, 222–223).³⁵

King Rāmacandra is said to have distinguished eight kinds of iron: sāmānya, krau-ṇīka, kāliṅga, bhadra, vajra, pāṇḍi, nīrava and kānta (III, 4–5). The three usual types of iron are described: muṇḍa, tīkṣṇa and kānta. The three varieties of muṇḍa are mṛ-du, kuṇṭha and kaḍāra (III, 6); the six varieties of tīkṣṇa are khara, sāra, hṛnnāla, tāra-paṭṭa, vajraka and kālāla (III, 7); the five varieties of kānta are bhrāmaka, cumbaka, karṣaka, drāvaka and romakānta (III, 14–15). Curved lines on the surface of steel are called pogara (III, 8–9). Plants helpful in the killing of iron are gaṇḍīnikā (also called sālahāṇīcī, haritparṇī and martakalambukā), kuṭhāracchinna, vikaṅkata and raktamāriṣa (III, 63–64). One method of killing iron, resulting in a product called sudhāsāgaralauha, has to be continued for 4,380 days and requires the juice of 4,380 different plants (III,

70–71).

An apparatus called bhṛṣṭayantra is employed in one of the operations leading to the killing of lead (III, 132). Rīṭikā (brass) is of two varieties: rājarīṭikā, consisting of two parts of copper and one part of zinc, and brahmarīṭi or kākātuṇḍī, an alloy of copper, zinc, and lead (III, 141). The alloy called triloha is composed of twenty-five parts of gold, sixteen parts of silver, and ten parts of copper (III, 152).

A particular gem, called bhallāta, is said to resemble an emerald (III, 201). Three kinds of sphaṭika are described: mandakāntika (found in the Vindhya), a black kind (found in Sri Lanka), and jyotīrasa; the last kind is of three varieties: rājāvarta, rājamaya and brahmamaya (III, 236). Upala is of three kinds: marmarāśman (chalcedony), varopala (opal) and rudhirapālaṅka (agate); a white marmarāśman is called karpūramaṇi; a black variety of upala is called bhramaramaṇi (III, 257–258).

Treatment with duly purified poison is said to cure the eight types of kuṣṭha; the unusual series of eight kuṣṭhas consists of puṇḍarīka, visphoṭa, śveta, audumbara, chinnabhinna, kāpālākha, klinnāhva and śavagandhi (III, 319).

The chapter on upaviṣas (III, 330–360) enumerates many names of the poisonous plants described; five varieties of karavīra are distinguished (III, 337) and four varieties of opium (III, 348); the resin from the flowers of hemp (i.e., hashish) is called gañjārāsa (III, 351).

A fermented fluid not known from other texts is jāli (III, 381).³⁶

The order of the diseases in volumes IV and V does not agree with any of the current arrangements.³⁷

The author and his date

The name of the author is Bhūdeva Devaśarma Mukhopādhyāya. He was a brāhmaṇa of Bhāradvājagotra, a son of Harilāla and Nistārīṇī, and was born in Bengal, in a village called Hastiśāla on the banks of the river Mayūrākṣī, in the year 1885. The author mentions Śrīharṣa, who composed the *Naiṣadhacarita*, as one of his forefathers.³⁸

Bhūdeva Mukhopādhyāya (Bhudeb Mookerjee) was a practising āyurvedic physician in Calcutta.

Chapter 6

Rasakāmadhenu to Rasāmṛta

The *Rasakāmadhenu*

The *Rasakāmadhenu* by Cūḍāmaṇi¹ is a compilation, based on earlier texts devoted to alchemy and iatrochemistry.

Contents²

The *Rasakāmadhenu* consists of four sections: upakaraṇapāda (seven chapters), dhātusaṃgrahapāda (five chapters), sūtakriyāpāda (nine chapters), and cikitsāpāda (fifty-nine chapters). Sections one to three comprise 5,566 verses, interspersed with comments in prose. The verses are borrowed from a large number of sources, mostly mentioned by name; the prose is added by the author.

The subjects of the chapters (adhikāra) of the upakaraṇapāda are: (1) the alchemical apparatus, implements, etc. (yantra; 179 verses); (2) the fire place (culhī), fuel, puṭas, weights and measures, vessels, etc. (culhyādi prakṛti; 73 verses); (3) plants used in alchemical operations (vanaśādhī; 138 verses); (4) major and minor poisons (viṣa and upaviṣa), substances of animal origin (jaṅgamavarga), oils (taila), various groups of substances, salts and caustics, biḍas, and rañjana (viśajaṅgamavasāpittatāilamalamūtrakṣāralavanabiḍarāga; 311½ verses); (5) the preparation of bijas (bījasādhana; 141½ verses); (6) the making of mixtures (dvandvamelana), krāmaṇa and rañjana (dvandvamelakrāmaṇarañjana; 182 verses); (7) the teacher, the sādha and his female companion, the initiation (dikṣā), the rasaliṅga and its worship, behavioural rules (ācāra) (rasasāadhanopāyakathana; 170 verses).

The subjects of the chapters of the dhātusaṃgrahapāda are: (1) the metals, their purification, killing, uses, etc. (sarvalohavidhāna; 923 verses); (2) the gems (maṇi or ratna), their purification, killing, liquefaction (druti), etc. (maṇiratnaśaṅkhavarāṭikādividhāna; 167 verses); (3) the mahārasas, their purification, the extraction of their sattvas, their killing, etc. (mahārasaṣṭakavidhāna; 384 verses); (4) the uparasas, their purification, the extraction of their sattvas, their uses, etc. (uparasavidhāna; 273 verses); (5) salts and caustics (lavanakṣāra; 50 verses).

The subjects of the chapters of the sūtakriyāpāda are: (1) the names of mercury, its eulogy, origin and varieties, a mātmya devoted to mercury, the blemishes of mercury and the disorders caused by them (rasanāmaśāntamātmyagunaḍoṣanirūpaṇa; 78 verses); (2) the saṃskāras, their number, short descriptions of the saṃskāras (rasasaṃskāravivekalakṣaṇasaṃkṣepakathana; 99 verses); (3) śodhana, svedana, mardana, mūrchna, pātana, nirodhana, niyamana, and dīpana (rasarājāṣṭasaṃskārakathana;

190 verses); (4) jāraṇa and related subjects (sūtājāraṇa; 372 verses); (5) additional information on the divine herbs (divyauṣadhi) and their uses (496^{1/2} verses); (6) jāraṇā of gems (ratna) for the purpose of rañjana (ratnādijāraṇa; 108 verses); (7) the types of bandha (baddhajāraṇa; 692 verses); (8) the preparation of various pills (guṭikā; 210 verses); (9) sāraṇa, māraṇa, vedha, sevā (sāraṇādi; 329 verses).

The subjects of the chapters of the cikitsāpāda are: the nidāna and therapy of (1) jvara, (2) dāha, (3) tṛṣṇā, (4) mūrchā, (5) apasmāra, (6) unmāda, (7) madātyaya, (8) pāṇḍurogādi, (9) raktapitta, (10) chardi, (11) amlapitta, (12) arocaka, (13) agniroga, (14) saṃgrahaṇī, (15) atisāra, (16) ānāha, (17) udāvarta, (18) urograha, (19) hṛdroga, (20) kṛmi, (21) śūla, pariṇāmaśūla, annadravaśūla, jaratpittaśūla, (22) gulma, (23) udara, (24) śoṭha, (25) ślipada, (26) aṇḍavṛddhi, (27) galagaṇḍa, gaṇḍamālā, apaci, arbuda, (28) medoroga, (29) prameha and pramehapiḍakā, (30) mūtrakṛcchra, (31) mūtrāghāta and asmarī, (32) kṣayaroga and rājyaksman, (33) kāsa, (34) śvāsa, (35) hikkā, (36) svarabheda, (37) vātavyādhi, (38) āmavāta, (39) vātarakta, (40) kuṣṭha, (41) śītapitta, udara, koṭha (42) kodrava and masūrikā, (43) kṣudraroga, (44) śūkaroga, (45) upadaṁśa, (48) arśas, (49) bhagandara, (50) vidradhi, (51) śārīravraṇa, (52) āgantukavraṇa, (53) nāḍīvraṇa, (54) dagdhavraṇa and snāyuroga, (55) netraroga, (56) ūrdhvajatrugataroga, (57) strīroga and somaroga, (58) bālaroga, (59) viṣa, (60) sāmānyavidhividhāna.³

The last chapter deals with general subjects: the doṣas, their excitation, general remedial measures (śveda, virecana, vamaṇa, raktamokṣa, laṅghana, dhūma, nasya, vrapakrama, śāstrakarman, etc.).

The works and authorities quoted or referred to are:⁴ the author's own *Abhidhānakāmādhenu* (I.4.5–6, 167–172, 175cd–182ab; II.1.65cd–69ab, 162–167ab, 690–695ab; 4.4–5), also quoted as *Kāmādhenu* (II.2.1–2 and 6–7; 3.218, 261, 276, 282, 319–321ab; 4.16–17ab, 173cd–175ab, 189, 194–197ab, 239–240; 5.1–9ab; III.1.1–2), *Ajīrṇamañjarī* (I.4.166),⁵ *Ayurvedaprakāśa* (II.1.168–170; 4.241–242),⁶ Bhāluki (II.4.220), the author's own *Bhāvacintāmaṇi* (I.4.4 and 145; II.1.197–198, 666–671, 695–699, 720; 2.8 and 35–39; 3.72; 4.20, 175–176, 201–203, 211–212, 238; III.1.34–37), *Candrajñānatantra* (mantras between I.7.141 and 142),⁷ Caraka (prose between II.1.689 and 690;⁸ 3.332–333, prose between 342 and 343), Devanāthamīśra (II.4.31–34; III.2.38),⁹ Devendragiri (I.1.69 and 157–158; 4.201cd–203ab; 5.30; 6.26–34; prose between 7.46 and 47; II.1.132–133ab and 576–580; 3.84–85; prose between III.4.39cd and 40; 7.472cd–489ab; 9.212), Devendragiri's *Rasāyanasārasaṃgraha* (I.5.136–141; II.1.256–267ab),¹⁰ *Devendragirisamgraha* (II.1.46, 498–505, 735–736; 3.67–68ab and 124–127; 4.26cd–29; III.7.32cd–36, 78–80ab, 112cd–119, 125cd–151, 249cd–252ab, 302–308; 8.55–68 and 73–117; 9.39cd–50 and 97–100ab),¹¹ *Devīyāmala* (1.66–69ab; 2.1–4; 4.311; 5.136cd; II.1.874–879; 3.149–157ab; 4.57–60ab and 230–231ab; III.2.36 and 39–47; 9.74–78),¹² *Dhānavantārīya* (II.1.98),¹³ *Gorakṣamata* (II.3.362–367), Hemacandra (prose between IV.9.242 and 243), *Kakṣāpuṭī* (III.5.316),¹⁴ *Lohapaddhati* (II.1.78–79, 668–675ab, 685–687, prose between 689 and 690, 699–702, 719, 723–724, 758–807; 3.69–71 and 80–82),¹⁵ *Lohaśāstra* (II.1.675–685ab), Manthānabhairava (I.3.54), Nāgārjuna (II.3.287), *Nighaṇṭurāja* (I.4.149),¹⁶ *Purandararahasya* (II.3.360–361), *Rasacintāmaṇi*

(I.4.240–256ab; II.1.81–83, 109–111ab, 317–318, 320–321, 349–403, 428–456, 478–482, 495–497, 519cd–521, 533–575, 610–647, 752–754, 852–860, 911–915; 2.125–127 and 133–137; 3.162–167ab, 246cd–248, 307cd–310; 4.104–173ab, 218, 252–254, 273; III.3.147–150ab and 160cd–163; 4.7–20, 37–40ab, 169cd–177ab, 264–268; 7.120–122, 212ab–220, 319–363, 431–454ab; 8.37cd–49ab and 118–131ab),¹⁷ *Rasadarpaṇa* (I.1.61–62ab; II.1.101–108; 3.383; III.1.44; 3.59), *Rasahrdaya* (often), *Rasālamkāra* (III.5.287cd–291), *Rasamañjarī* (often), *Rasamārtanḍa* (I.4.2–3ab, 83–84, 174cd–175ab, 239, 300cd–304ab; 7.45–46; II.2.31cd–35ab; 3.311–312; III.2.20–22; 3.2 and 5cd–7ab; 9.313–328), *Rasāmṛta* (II.1.4–5ab, 20, 74, 889–897ab), *Rasapaddhati* (often), *Rasapaddhatiṭīkā* (often), *Rasapradīpa* (II.1.506), *Rasarahasya* (III.5.280cd–287ab), *Rasarājahamsa* (II.4.21–22; III.4.177cd–178ab), *Rasarājalakṣmī* (I.4.150–158ab, 191–197, 203cd–211; II.1.34–43ab; 3.2cd–4ab; prose between 3.4 and 5, 24cd–26ab, 221, 265cd–270ab; 4.3; III.1.40; 3.7cd–9ab; 4.113–139 and 312–325ab; 7.204–205), *Rasaratna* (II.1.111cd–116), *Rasaratnadīpikā* (III.3.1; 8.49cd–54), *Rasaratnākara* (often), *Rasaratnapradīpa* (II.1.518cd–519ab; III.4.198–200; 7.203), *Rasaratnapradīpikā* (I.5.21–22; II.1.918–923; 4.30; III.1.55; 3.25cd–27, 80cd–81, 103–104; 4.187cd–189ab and 211–214; 5.343–344), *Rasaratnasamuccaya* (I.1.25–29ab), *Rasārṇava* (often), *Rasasamketakalikā* (I.4.51–52ab, 62cd–63, 74cd–75ab, 77cd–80ab; II.1.73cd, 117–119, 171, 308–309, 314, 322–326, 465, 689, 866–870ab; 3.135 and 215; III.1.12cd–15), *Rasasāra* (often), *Rasavāgbhaṭa* (I.1.130cd–131; III.4.164cd–169ab), *Rasāyanasārasaṃgraha* (II.1.599cd–601ab; III.7.182cd–202),¹⁸ *Rasendracintāmaṇi* (often), *Rasendracūdāmaṇi* (often), *Rudrayāmala* (III.3.165cd–185; 4.236–241), *Śaivālabhākṣya(mata)* (I.1.133–144; II.3.359), Somadeva (I.3.54),¹⁹ *Somanāthasaṃgraha* (II.1.344cd–347),²⁰ *Suśruta* (I.4.9; prose between 4.35 and 36; II.5.17; prose between 5.29 and 30), Trilocana (prose between I.2.40 and 41), *Vāgbhaṭa* (prose between II.3.342 and 343), *Vaidyakalpadrūma* (II.1.472cd–477, 511cd–514ab, 885cd–888; 3.170cd–174, 233, 335cd–338ab, prose between 377 and 378; 4.69cd–72ab and 215–216), *Vaidyakalpataru* (II.1.182–184ab), and *Yāmala* (I.1.161–164; II.4.190–192ab).

Some quotations are from a source not mentioned by name.²¹ Variants of verses quoted are occasionally referred to in the comments of Cūḍāmaṇi.²²

The *Rasakāmādhenu* is, in spite of its compilatory character, an interesting and valuable work. The quotations abound in readings which may profitably be compared with those of the manuscripts and editions of the works cited.²³ The *Rasakāmādhenu* also contains numerous passages from less well-known treatises.

Particularly interesting are the quotations from the *Abhidhānakāmādhenu* and *Bhāvacintāmaṇi*, written by Cūḍāmaṇi himself, and those from the *Rasāyanasārasaṃgraha* or *Devendragirisamgraha* by Devendragiri. The *Abhidhānakāmādhenu* is one of the sources of the *Pāradasaṃhitā*; it is quoted in one of the parīśiṣṭas of the *Ānandakanda*.²⁴ The *Bhāvacintāmaṇi* is cited in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*. Devendragiri and his *Rasāyanasārasaṃgraha* are quoted in Gulrājsarmamīśra's commentary on the *Āyurvedaprakāśa*.

The passages from the *Abhidhānakāmādhenu* show that it was an alchemical nighaṇṭu in verse, dealing with the origin, names and varieties of many substances employed

in alchemical operations. Distinctive features of the *Abhidhānakāmadhenu* are, for example: sixteen poisons of vegetable origin, which constitute an unusual series: viṣa, hālāhala, brahmaputra, saurāstrakāhvaya, pradīpana, dāradākhyā, kākola, śauktikeyaka, ahicchattrā, meṣaśṛṅga, kuṣṭha, haimavata, pippala, pātāla, malina, and kambala (I.4.5–6); groups of kṣāras, consisting of up to ten items (I.4.175cd–179); twelve varieties of tikṣṇaloḥa: khara, yogala or yogara, vājara, honnāla, pāraśava, sāndra, sāra, auṇḍra, kāliṅga, bhadra, pāṇḍya, and kṛṣṇāyas (II.1.690–695ab); some of the names of rasaka: jasada, caura, śiśakākāra, kharpara, kharparikā, kiṭibha, hematāraja (I.4.282); the series of uparasas: gandha, tāla, śilā, saumya,²⁵ añjana,²⁶ tuttha, abdhiphenaka, khaga (= kāsisa), sindūra, giriṇa, khaṭṭi, aśman, kācamṛttikā, sphaṭikā, goja, kaṅkuṣṭha, rājāvarta, the salts and the caustics (II.4.4–5).

The *Bhāvacintāmaṇi* was concerned with the merits and defects (guṇas and doṣas) of these substances. This work also listed the items belonging to some groups of substances; an example is the vidvarga (I.4.145).

Devendragiri's *Rasāyanasārasaṅgraha* was, as appears from the quotations, a complete alchemical treatise in verse, containing independent descriptions of many processes; Devendragiri's views deviated in some respects from those of earlier authorities.²⁷

The *Rasakāmadhenu* is quoted in the prakīrṇaka pariśiṣṭa of the *Ānandakanda*, Guṇrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, the *Āyurvediya Khanijavijñāna*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Narendranātha's *Capalanirṇaya*, incorporated in the *Rasatarāṅgiṇī*, and in the *Rasatattvavivecana*. It was one of the sources of the *Bheṣajasaṃhitā*, Devasiṃha Viṭṭhal's *Bṛhadāsavārīṣṭasaṅgraha*, Hariśaraṇānanda's *Kūpīpakvarasanirmānavijñāna*, the *Pādasamhitā*, *Rasadhātuprakāśa*, *Rasayogasāgara*, *Rasendrasambhava*, *Rasoddhāraṇtra*, and Somadevaśarma's commentary on the *Āyurvedaprakāśa*.

Cūḍāmaṇi is quoted in Guṇrājśarmamiśra's commentary on the *Āyurvedaprakāśa* and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Special features

Cūḍāmaṇi's very systematic treatise usually gives the opinions of a number of authorities on a particular subject, without making a choice. He is not even biased when quoting the views of his teacher, Devendragiri. Incidentally, he makes a personal statement.²⁸ Occasionally, he rejects statements made in particular works.²⁹

Cūḍāmaṇi adds a large number of valuable glosses to his quotations. He gives information on the uses of the yantras³⁰ and explains which terms are synonymous.³¹ Technical terms are frequently elucidated.³²

Cūḍāmaṇi's comments are concise in most cases, but, sometimes, they are elaborate and detailed.³³

The remarks on the identity of plants are useful: alaka (II.1.11: = devadālī), cakrī (I.3.24: = cakriṇīlatā and cakramarda), cāṇḍālī (I.3.23: = bhūmyāmalakī and a divyauśadhi), daṣuṇa (I.4.235: = raktaśāka), dhāvanī (III.3.59: = prṣniparṇī), gaṇḍanikā (II.1.760: = gaṇḍadūrvā), gartakalambukā (II.1.761: = nākulī), haritparṇī (II.1.761: = kumā-

rī), hima (II.3.115: = kaṭphala), kāmācī (II.3.188: = kākamācī), maurvī (II.3.193: = bhū-rjapattrā), raktasnuhī (I.3.24: = sātalā and a climber which resembles sehūṇḍa), raktaśṛṅgī (I.3.24: = a variety of śāka and some climber), raktavarṇa (I.3.26: = citraka and eraṇḍa), ratnapuṣpā (I.1.139: = atasī), śālahañcī (II.1.761: = mañjiṣṭhā), smāriṇī (III.3.59: = matsyākṣī or vacā), śṛgālī (III.3.59: = śāliparṇī), stokā (II.1.760: = balāmoṭā), uccaṭā (I.3.26: = śvetaguṇjā and some climber), vanaka (II.1.895: = tumburu), vanamākṣika (II.1.763: = vanamadhūka), vegā (II.3.196: = jyotiṣmatī), vīrā (III.7.226: = vidārī), vraṇaghnī (III.3.27: = kumārī), vyāghrī (I.3.27: = kaṇṭakārikā and some climber).

The lists of plants used in alchemical operations are quoted from several sources. Some lists are from the *Rasārnava* (I.3.12cd–22 and 38cd–43),³⁴ *Rasasāra* (I.3.34–36³⁵ and 3.124–138),³⁶ and *Rasendracūḍāmaṇi* (I.3.54–123).³⁷ A list, quoted from an unknown source, enumerates the following plants called mūlikā: ādityabhaktā, aṅkulī, apāmārga, avākpuṣpī, bhārṅgī, bhekaparṇī, candravallī, citraka, devadālī, eraṇḍa, gavākṣikā, goḍumbā,³⁸ gopālākarkaṭṭī, halinī, harikrāntā, indrā, kāṇḍavallī, karkoṭī, kokamā, kṣīrakandaka, kuḍahañcī, kuṭṭāra, mūṣakakarṇī, nākulī, punarnavā, rudantī, śāpikā, śaṅkhaṣupikā, śarapunkhā, śikhiśikhā, snuhī, tridhārā,³⁹ tridhāraka, ūrdhvapunkhikā, vajrakanda, and vajrī (I.3.7cd–12ab).⁴⁰

The list said to be from the *Rasaratnākara* cannot be traced in that treatise;⁴¹ it consists of the following plants called rasamūlikā: adrikarṇikā, ākhukarṇikā, amṛtākanda, bhṛṅga, brahmadandī, bhūkanda, cakramarda, citraka, dhattūra, dūrvā, grīṣmasundara, haridrā, hastiśuṇḍī, iṣupunkhikā, jayantī, jāṭī, kākajaṅghā, kākamācī, kañcukī, kaṭutumbikā, kośātakī, kṣīriṇī, kusumbhaka, lajjālu, lāṅgalī, mahārāṣṭrī, maṇḍūkakarṇī, matsyākṣī, mūrvā, nīrakaṇā, pātālī, raktāgrānirguṇḍī, rambhā, rasāṅkuṣā, śairyaka, śaṅkhaṣupikā, śarpākṣī, śatāvarī, śigru, śikhiśikhā, śimbikā, śrīdevī, suradālīkā, sūryāvarta, śvetārka, tilaparṇikā, utpala, vajrakandā, vajralatā, vandhyā, vārāhī, and varṣabhū (I.3.1–7ab).

The arrangement of the diseases in the *Cikitsāpāda* is unusual and does not conform to a recognized pattern. Most of the nidāna verses of this section are from the *Mādhavanidāna*. Diseases added to those described by Mādhava are urograha (18),⁴² snāyuroga (54), and somaroga (57).⁴³

The chapter on jvara mentions several series of saṃnipāta fevers, without describing them: (1) viṣphāra, śighrakārin, puṣpaṇa, vidhura, makarin, phalgu, vaidārin, karṇaka, karkoṭaka, saṃmoha, yāmya, krakaca, pālaka, kūṭapālaka (I.168–169);⁴⁴ (2) sandhiga, jihvaka, pralāpaka, tandrika, rugdāha, śitagātra, karṇaka, cittavibhrama, raktaśṭhīvin, kaṇṭhakubja, bhugnanetra, abhinyāsa, saṃnyāsa, hataujas (I.170–174);⁴⁵ (3) antardāha, daṇḍapāta, antaka, kumbhīpāka, prarūṇāva, pralāpin, eṇḍāha, bhūtaḥāsa, ajaghoṣa, hāridra, saṃśoṣin, yantrāpīḍa, saṃnyāsa (I.175–179).

The total number of irregular fevers (viṣamajvara) is said to be thirty-five. Apart from the well-known types, some other fevers belonging to this group are: saptāhasaṃtata, daśāhasaṃtata, dvādaśāhasaṃtata, pañcadinajvara, ṣaḍdinajvara, pralepaka, vātabalāsaka, tṛṇapuṣpaka, oṇirodhajvara, and rātri- or velājvara (I.611–622).

The treatments described are not restricted to rasayogas, but comprise more traditional āyurvedic measures and prescriptions as well.

The author

Cūḍāmaṇi was a grandson of the physician Balabhadramiśra, who was a Śākadvīpiya brāhmaṇa, and a son of Harirāma.⁴⁶

Cūḍāmaṇi was a pupil of Devanāthamiśra; some verses from an alchemical treatise by the latter are quoted in the *Rasakāmadhenu*.

P.K. Gode⁴⁷ tentatively identified this Devanātha with the father of the Vāsudeva who wrote a commentary, called *Bhuvanacandrikā* or *Bhuvanārthacandrikā*, on Subandhu's *Vāsavadattā*.⁴⁸ Vāsudeva's references to himself as a Śākadvīpiya made P.K. Gode advance this hypothesis. The provisional identification was supported by evidence, discovered somewhat later by P.K. Gode, after studying a MS of Vāsudeva's commentary.⁴⁹ Vāsudeva, who calls his father Devanātha an eminent physician and a second Dhanvantari, refers to and quotes from a work on rasaśāstra, called *Rasamuktāvalī*, written by him.

The relationship between Cūḍāmaṇi and Devendragiri, author of the repeatedly quoted *Rasāyanasārasaṃgraha*, remains to be elucidated.

Date

Cūḍāmaṇi's chronological position can be deduced from his acquaintance with Mādhava Upādhyāya's *Āyurvedaprakāśa*.⁵⁰ His posterity to Mādhava Upādhyāya implies that he lived after the second half of the seventeenth century.⁵¹ This date is confirmed by the quotation from Kāśinātha's *Ajīrṇamañjarī*, the earliest MS of which was completed in A.D. 1617.

The Rasakaumudī

The *Rasakaumudī* by Jñānacandraśarma⁵² is a treatise that can be divided into an alchemical (chapters one to three) and an iatrochemical part (chapter four). The work is written in a defective language and style.⁵³

Contents

Chapter one (rasotpattyadhikāra; 20 verses) has five introductory verses, followed by an account of the origin of mercury (1.6–20). Chapter two (rasendraśuddhyadhikāra; 30½ verses) is concerned with nine defects (doṣa) of mercury (2.3–4ab), the disorders they give rise to (2.4cd–6), and nine saṃskāras and their effects (7–30½). Chapter three (96 verses) describes the purification (śuddhi) of all the lohas and pāṣāṇas (3.1–5ab),⁵⁴ the purification of gandhaka and abhraka (3.5cd–8), sattvapātana of all the pāṣāṇas (3.9–15ab), druti of pāṣāṇa, vajra, loha and abhraka (3.15cd–21ab), māraṇa of triloha, i.e., nāga, vaṅga and rasaka (3.21cd–23ab), māraṇa of all the lohas (3.23cd–26), two types of māraṇa of abhraka (3.27–31ab), māraṇa of vajra (3.31cd–34ab), two types of māraṇa of mercury (3.34cd–37), four varieties of rasabhasman and their medicinal properties (3.38–43), a ritual (siddhapūjāvidhi) to pay homage to the eight Siddhas, nine Nāthasiddhas and their spouses, and the nine Durgās⁵⁵ (3.44–53ab), the preparation of iṣṭārthasiddhiguṭikā (3.53cd–67),⁵⁶ rasadīpana (3.68–71ab), grāsapradāna (3.71cd–78ab), rasamukhabandha (3.78cd–89), vedāmukharasa

(3.90–93), and dhūmavedhirasa (3.94–96). Chapter four (132 verses) describes thirteen rasayogas. The treatise ends with the formula of trailokyacintāmañjarasa.

Sources are not referred to.⁵⁷ Three formulae are attributed to Śaṃkara,⁵⁸ Śaṃmukha⁵⁹ and Viśvāmītra⁶⁰ respectively.

Jñānacandra's *Rasakaumudī* is one of the sources of the *Rasayogasāgara*.

Special features

The account of the origin of mercury (rasotpatti) in chapter one differs from the versions found in other texts.⁶¹ The nine doṣas of mercury described in the *Rasakaumudī* are: uddīnatva,⁶² kauṭīlya, anāvarta,⁶³ saṃkara, ṣaṇḍatva, vahnikāritva, samalatva, gurutva, and saviṣa (2.3–4ab).⁶⁴ The disorders brought about by these defects are: (1) śūla, (2) kapālaruj, (3) bhrāmodvega, (4) doṣasaṃcaya, (5) asaṃtāna (infertility), (6) kuṣṭha, (7) vānti, mūrchā and mahodara, (8) jāḍya and mūrchā, and (9) gātrakṣaya (2.4cd–6). The kañcukas are left unmentioned.

The nine saṃskāras, leading to a product able to bring about deha- and lohasiddhi are: mardana, utthāpana, (adhaḥ)pātana, dīpana,⁶⁶ jāraṇa, sārāṇa,⁶⁷ grāsapradāna,⁶⁸ rañjana, and krāmaṇa (2.7–30½). The term triloha is used to designate lead, tin and rasaka (3.21cd–23ab).⁶⁹ The second type of māraṇa of mercury (3.36–37) does not result in māraṇa, but in mūrchana.⁷⁰ Four varieties of rasabhasman are described: kṛṣṇa, pīta, śyāma and karbura in colour (3.38–41);⁷¹ these substances are medicinally valuable; the kṛṣṇa variety leads to dehasiddhi, the yellow (pīta) one removes kuṣṭha, the śyāma variety removes all the doṣas, the karbura variety has aphrodisiac properties; an added fifth variety, red in colour, abolishes the three doṣas (3.42–43). Eight lohas are referred to (4.1).

Interesting terms occurring in the *Rasakaumudī* are: aṣṭaśūla (4.46 and 74), pañcamitraka (3.17), maṇḍala (4.22, 23, 31, 100, 123, 129),⁷² raktagrahaṇi (4.66),⁷³ raktagrahiṇikā (4.58 and 66), sindūra (4.27),⁷⁴ takrameha (4.17),⁷⁵ vajratuṇḍījantu (3.32), and vṛścikavāta (4.11).

Noteworthy plant names are: bhūdantī (4.13 and 119), bhūguñjā (4.70), bhūśigru (4.70), dvijihvā (4.119), dvikaṇṭikā (4.119), gorakṣikā (2.28),⁷⁶ kaḍukanda (3.11), kaṇḍūkī (3.9), kṛṣṇacitraka (4.93), kṛṣṇāmalaka (4.93), kṣīrakarṇī (3.9), kurūṭikā (3.9), mātāṅga (4.55), nīlabhrṅgī (4.12), nīlaśṛṅgī (3.38), and śvetagandhārī (4.119).

The author

Jñānacandra was a brāhmaṇa and a son of the physician Sarvajñacandra of Candrasekhara lineage.⁷⁷

Date

The period to which the author belonged cannot be determined with accuracy. The references to the nine Nāthasiddhas and to a group of eight metals (aṣṭaloha) imply that it is not an early work.⁷⁸

An anonymous Rasakaumudī

An anonymous *Rasakaumudī*⁷⁹ deals with the purification of mercury, a number of

twenty-seven *rasayogas*⁸⁰ and how to administer them, antidotes (*viśaśānti*), signs pointing to health (*svasthāriṣṭa*) and signs pointing to a bad prognosis (*ariṣṭa*).

The *Rasamañjarī*

The *Rasamañjarī* by Śālinātha⁸¹ is an alchemical and iatrochemical treatise in 867 verses,⁸² arranged in twelve chapters (*adhyāya*).⁸³ The work is in the form of a conversation between Śiva and Pārvaṭī.⁸⁴

Contents⁸⁵

Chapter one (*rasaśodhanaprakāra*; 39 verses) deals with introductory matter (1–4), the praise of mercury (5–8), the teacher and his pupil (9–13), the names and varieties of mercury (14–15), the doṣas of mercury and the disorders arising from them (16–19), and some methods of purifying (*śodhana*) mercury (20–39).

Chapter two (*rasajāraṇamāraṇādi*; 64 verses) describes the *jāraṇa* of several substances by mercury (1–11), several types of *māraṇa* of mercury (12–16), several methods of preparing *rasasindūra* (17–41) and *rasakarpūra* (42–45), *mūrchanā* (46–51), *bandha* (52–58), and rules concerning the use of mercurial products (59–64).⁸⁶

Chapter three (*uparasaśodhanamāraṇa*; 101 verses) is about the *uparasas* (1–3ab); its subjects are the origin of sulphur (3cd–5ab), its varieties (5cd–6), the disorders caused by impure sulphur (7), its purification (8–13), the preparation of *gandhakatāila* (14–15); the varieties, characteristics and properties of diamonds (*vajra*; 16–21),⁸⁷ disorders caused by impure diamonds (22), their purification (23–25ab) and *māraṇa* (25cd–30), the varieties, properties and *māraṇa* of *vaikrānta* (31–34), the varieties of mica (*abhraka*) and their properties (35–38), the preparation of *dhānyābhraka* (39–43ab), *māraṇa* of mica (43cd–56), the *śodhana* and *māraṇa* of *tāla* (57–61), the *śodhana* of *manāṣīlā*, *rasaka*, *tuttha*, *vimala*, *mākṣika*, *kāsīsa*, *kāntapāṣāṇa*, *varāṭikā*, *hīṅgula*, and *śilājātu* (62–83), the *śodhana* of the remaining *uparasas* (84), the preparation of *bhūnāga*-, *vaikrānta*- and *abhrakasattva* (85–91), the fusing (*drāvaṇa*) of mica (92), the extraction of various *sattvas* (93–96), and *śodhana* and *māraṇa* of gems (*maṇi*; 97–101).

Chapter four (*viśalakṣaṇasevāparihāra*; 31 verses) describes eighteen plants with poisonous bulbs or tubers (*kanda*) (1–10), their *māraṇa* (11–13), the way to employ them medicinally, together with the dosages (14–21), the seven stages (*vega*) of intoxication (22–25), a mantra preventing intoxication (26) and the way to use it (27–28), prescriptions against poisoning (29–31).

Chapter five (*svarnādyaṣṭadhātuśodhanamāraṇasevana*; 71 verses) is concerned with the *śodhana* and *māraṇa* of the eight metals: gold (3cd–17ab), silver (17cd–24ab), copper (24cd–36), *rājārītī* (= *pittala*) and *ghoṣa* (= *kāmsya*) (37), lead and tin (38–48), and iron (49–67); the medicinal properties of the products obtained are described; the chapter ends with the properties of *lohakiṭṭa* (= *maṇḍūra*; 68–71).

Chapter six (*rasayojanabhakṣaṇa*; 307 verses)⁸⁸ contains formulae of *rasayogas*. Chapter seven (*rasāyanaguṭikā*; 60 verses)⁸⁹ is about *rasāyana* formulae. Chapter eight (*netrāñjanakeśarañjana*; 28 verses) is devoted to recipes against eye diseases and

premature greyness of the hair. Chapter nine (*vīryastambhanādikautūhalanirūpaṇa*; 78 verses)⁹⁰ describes subjects usually dealt with in Tantric treatises about *śaṭkarman*. Chapter ten (*bālatantra*; 32 verses) reproduces a *Bālatantra*. Chapter eleven (*kālajñāna*; 44 verses) is about *ariṣṭas*. Chapter twelve (*chāyāpuruṣalakṣaṇa*; 12 verses) describes *ariṣṭas* connected with one's shadow (*chāyā*), as taught by Śambhu.

Sources are not referred to.⁹¹ One recipe is ascribed to Nāgārjuna.⁹² A *Mālatīmata* is also mentioned.⁹³

The *Rasamañjarī* is quoted or referred to in the *paribhāṣā* *pariśiṣṭa* of the *Ānanda-kanda*, the *Āyurvedaprakāśa*, Caturbhujā's commentary on the *Rasaḥḍaya*, the *Dhātumāraṇa*,⁹⁴ Hariśaraṇānanda's *Kūpīpakvarasānirmāṇavijñāna*, Meghamuni's *Megha-vinoda*,⁹⁵ Nidhi's *Yogasamuccaya*, the *Pāradasaṃhitā*, *Rasakāmadhenu*, *Rasasaṃgraha-siddhānta* by Govindarāma,⁹⁶ *Rasasārāmṛta* by Rāmasena,⁹⁷ *Rasāyanasaṃgraha*,⁹⁸ *Rasayogasāgara*, *Rasendrasambhava*, *Rasendrasārasaṃgraha* by Gopālakṛṣṇa, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, the *Yogarātnākara*,⁹⁹ the *Yogata-raṅgiṇī*¹⁰⁰ and *Bṛhadyogata-raṅgiṇī*¹⁰¹ of Trimalla, and the *Sukhabodha* of Vaidyārāja.

Commentaries on the *Rasamañjarī* were written by Harinābha,¹⁰² Rāmanātha,¹⁰³ and Samaratha.

Samaratha was a Śvetāmbara Jain of the Sāgaracandrasūri branch of the Kharataragaccha, and a pupil of Matiratna or Sumatiratna. He lived in Bīkāner. Samaratha's name was changed into Samayamāṇikya after his ordination. Samaratha composed his Hindi commentary on the *Rasamañjarī* in A.D. 1707. He also wrote a Sanskrit commentary on Keśavadāśa's *Rasikapriya*, composed in Brajbhāṣā; this commentary was completed in A.D. 1698.¹⁰⁴

Special features

Eight doṣas of mercury are enumerated: *nāga*, *vaṅga*, *agni*, *cāñcalya*, *asahyatva*, *viṣa*, *giri* and *mala*; the disorders they bring about are *jāḍya*, *kuṣṭha*, *mahādāha*, *vīryanāśa*, *mūrchanā*, *mṛtyu*, *sphoṭa* and *rogapuñja* (1.17–18). A second series of five doṣas, consisting of *śiloccaya*, *mṛdbhava*, *atimalina*, *nāga* and *vaṅga* leads to *kuṣṭha*, *jāḍya*, *atyantavāta*, *galagaṇḍa* and *gulma* (1.19).¹⁰⁵ The *uparasas* distinguished are *gandhaka*, *vajra*, *vaikrānta*, *gagana* (= *abhraka*), *tālaka*, *śilā*, *kharpara*, *śikhituttha*, *vimalā*, *hemamākṣika*, *kāsīsa*, *kāntapāṣāṇa*, *varāṭa*, *añjana*, *hīṅgula*, *kañkuṣṭha*, *śaṅkha*, *bhūnāga*, *ṭaṅkaṇa*, and *śilājātu* (3.1–3ab).¹⁰⁶ Four varieties of sulphur (*gandhaka*) are mentioned: red, yellow, white and black, useful for making gold (*hemakriyā*), for *rasāyana* purposes and in ointments on ulcers respectively; the black variety is the best one (3.5–6). Diamonds (*vajra*) are white, red, yellow and black; these varieties are called *brāhmaṇa*, *kṣatriya*, *vaiśya* and *śūdra*; they are suitable to *rasāyana* purposes, to curing diseases, to *vāda* (i.e., alchemy) and to *vayaḥstambha* (i.e., *rasāyana*) purposes; diamonds are also male, female or neuter and fit for *vedha* and *rasabandha*, *dehasiddhi*, and *krāmaṇa* (3.16–21). Eight types of *vaikrānta* are mentioned: white, red, yellow, blue, grey (*pārāvataccavi*), *śyāmala*, black, and *karbura* (3.32).¹⁰⁷

The usual four varieties of mica (*abhraka*) are enumerated: *pināka*, *dardura*, *nāga* and *vajra* (3.35). Poisonous plants are eighteen in number: *kālakūṭa*, *mayūrākhyā*,

binduka, saktuka, vāluka, vatsanābha, śaṅkhanābha, sumāṅgala, śrīṅgī, markāṭaka, musta, kardama, puṣkara, śikhī, hāridra, harita, cakra, and hālāhala (4.1–3ab). Eight stages of poisoning are distinguished, characterized by udvega, vepathu, ghoradāha, patana, phena, vikalatā, jaḍatā, and mṛtyu (death) (4.23–25).

Chapter five does not mention zinc as one of the metals.

The majority of the formulae of chapter six are well known and found in many rasaśāstra texts. Some of them may be rare or even restricted to the *Rasamañjarī*.¹⁰⁸

The rasāyana formulae of chapter seven are partly frequent, partly rare or peculiar to the author of the *Rasamañjarī*.¹⁰⁹

Chapter nine is a collection of prescriptions; they are meant to prevent or delay ejaculation (vīryastambha; 1–11), to increase the size of the penis (12), to cause impotence (13–15), to cure it (16–17), to increase potency (21–24), and to cure a series of diseases (25–29). The remaining part of the chapter contains recipes that ensure impregnation (30), that are suitable to vaśīkaraṇa (31–37ab), to tightening of the vagina (37c–f), removal of the pubic hair (38–39), etc. (40–78).

Chapter ten contains a *Bālatantra*, related to Rāvaṇa's *Kumāratantra* and other such texts.¹¹⁰ It enumerates sixteen Yoginīs who attack a child on the first day, month or year of its life, the second day, etc., up to the sixteenth. The symptoms of the illnesses are mentioned, together with the rituals that are appropriate to appease the beings causing them.

The names of these malignant beings are: Nandā, Āryā, Pūtanā, Bhīṣaṇāsyā, Bīḍālī, Śakunī, Śuṣkā, Jṛmbhikā, Acintyā, Kāpālikā, Lipsitā (or Nandikā), Pitalī, Bhadrakālī, Tārā, Śarvarī (or Sumukhī), and Kumārī.

Some noteworthy terms employed in the *Rasamañjarī* are āgala (2.26), pāṣā-ṇapaṭikā (2.25),¹¹¹ and sphaṭikī (2.24).¹¹²

The eight kakāras consist of kūṣmāṇḍa, karkaṭī, kaliṅga, kāravellaka, kusumbhika, karkoṭī, kadālī, and kākamācīkā (2.59–60).

The author

Śālinātha was a son of Vaidyanātha.¹¹³

Date

The earliest MS of the *Rasamañjarī* was completed in A.D. 1546/47,¹¹⁴ which indicates that the *Rasamañjarī* is earlier than the middle of the sixteenth century.¹¹⁵ The reference to the author of the *Rasamañjarī* in Gopālakṛṣṇa's *Rasendrasārasaṃgraha* makes it possible to push back the terminus ante quem to a period anterior to the last quarter of the fifteenth century. The upper limit cannot be ascertained.¹¹⁶

The Rasamitra

The *Rasamitra* by Tryambakanātha Śarmā¹¹⁷ is a treatise that lays emphasis on the medicinal uses of alchemical products.

Contents

The *Rasamitra* is a work in six chapters (raśmi), dealing with generalities and technical terms (1), mercury (2), the mahārasas and uparasas (3), the dhātus (4), the ratnas and uparatnas (5), the viṣas and upaviṣas (6).

Chapter one (sāmānyavijñānīya) describes, after a maṅgala to Śiva and some introductory verses, the subjects of rasaśāstra, the teacher and his student, the laboratory (rasaśālā; 4–6), technical terms (paribhāṣā; 7–12), weights and measures (parimāṇa; 13–14),¹¹⁸ the yantras (15–24),¹¹⁹ and the puṭas (24–28).¹²⁰ Chapter two (rasavijñānīya) gives an account of mercury and its doṣas (29–35), its purification (36–37), the first eight saṃskāras (37–44), the preparation of mercury from cinnabar (44), jāraṇā and mūrchanā (44–46), the preparation of mugdharasa, rasapuṣpa and rasakarpūra (47–48), some formulae (49–56),¹²¹ and some rules concerning the use of mercurial medicines (57–58). Chapter three (uparasavijñānīya) is about the mahārasas, their names, characteristics, purification, sometimes their killing, the properties and actions of the products obtained, their uses, dangers involved in their use, and the treatment of disorders caused by the use of impure products (59–84); the second part of the chapter (84–95) is devoted to a description of the uparasas, their purification and the neutralization of the effects of impurities; the third and last part is about the sādharmaṇas (95–105). Chapter four (dhātuvijñānīya; 106–130) is concerned with the dhātus, their purification, killing, and the medicinal properties of the products obtained. Chapter five (ratnaparatnavijñānīya; 131–177) gives a similar exposition on the ratnas, uparatnas and some other stones. Chapter six (viṣopaviṣavijñānīya) describes the viṣas, their purification, and their uses in medicine (178–208); the second part of the chapter is about the upaviṣas (208–244) and animal poisons, their purification and their uses (245–248).

Sources referred to in the Sanskrit text are the *Rasaratnasamuccaya* (209), *Rasasamketalikā* (208), *Rasasāra* (281), and *Rasendracūḍāmaṇi* (282).

Special features

Twelve doṣas of mercury are distinguished: three naisargikadoṣas (natural blemishes): viṣa, vahnī, malā; two yaugikadoṣas (adulterants): nāga (lead) and vaṅga (tin); seven aupādhikadoṣas or kañcukas (blemishes due to the environment): parpaṭī (bhūmijā), pāṭalī (girijā), bhedī (vārijā), drāvī and malakarī (nāgajā), andhakārī and dhvāṅkṣī (vaṅgajā) (29–35). The eight saṃskāras described are svedana, mardana, mūrchanā, utthāpana, pātana, bodhana, niyāmana, and dīpana (37–44). Six types of mūrchanā are mentioned (46).¹²²

The group of mahārasas consists of abhraka, vaikrānta, māksīka, vimāla, adrija (= śilājatu), sasyaka, capala, and rasaka (59).¹²³ The group of uparasas is composed of gandhaka, gairika, kāsisa, kākṣī (= tuvarī), (hari)ṭāla, (manah)śilā, aṇjana, and kañkuṣṭha (84). The group of sādharmaṇas is made up of kampilla, gaurīpāṣāṇa, navasā-dara, kaparda, vahnijāra (= agnijāra), girisindūra, hiṅgula, and mṛddāraśṅga (95). The seven dhātus are gold, silver, copper, iron, zinc, tin and lead (106); three alloys are mentioned: pittala, kāmṣya and varta (106). Three varieties of iron are referred to: muṇḍa, tūkṣṇa and kānta (117).

Nine gems (ratna) are described: māṇikya (ruby), muktā (pearl), vidrūma (coral),

tārksya (emerald), puṣpa (topaz), bhidura (diamond), nīla (sapphire), gomedaka (zircon), and vidūraka (cat's eye) (131). The six minor gems (uparatna or kṣudraratna) are: vaikrānta (Irish diamond), sūryakānta (sunstone), candrakānta (moonstone), nr̥pōpala (lazis lazuli), peroja (turquoise), and sphaṭika (rock crystal) (157). Other stones and substances described are: vyomāśman or saṅgayaśava (jade), pālaṅka (onyx), rudhira (carnelian), pūtikā (peridot), sugandhika (spinel), turmulī (tourmaline), tṛṇakānta (amber), sudhā (calcium), khaṭikā (chalk), dugdhapāśāṇa (talc), godantī (gypsum), śrīṅga (horn), kauṣeyāśman (asbestos), nāgāśman (serpentine), and badarāśman or āśma-bhid (a calcium silicate) (163–177).

The chapter on poisons mentions five mahāviṣas: saktuka, kālakūṭa, sitamusta, śrīṅgī, and kṛṣṇaviṣa (181); series of viṣas from another treatise, from the *Rasasāra*, and from the *Rasendracūḍāmaṇi* are quoted (181–182). Vegetable poisons described are: saktuka, mustaka, śrīṅgī, saikata, sarṣapa, kūṛma, dārvika, vatsanābha, kālakūṭa, meṣa-śrīṅgī, hālāhala, dārdura, karkoṭa, mūlaka, granthi, hāridra, raktaśrīṅgī, and pradīpana (183–192). The substances belonging to the group of upaviṣas are quoted from the *Rasamketakalikā*, some other treatise, and the *Rasaratnasamuccaya*. The author of the *Rasamitra* distinguishes the following upaviṣas: jayapāla, arka, dhātūrā, viṣatinduka, guṇḍī, sehuṇḍa, lāṅgali, karavīra, ahiphena, vijayā, and bhallātaka oil (209); these poisonous substances are described; tridhārā (210) and nīlinī (237–238) are added.

The author and the date of the work

The *Rasamitra* is a twentieth-century work written by the author when he was a reader in Dravyaguṇa of the Banāras Hindu University.

Rasāmṛta

Rasāmṛta by Vaidya Yādavjī Trikamjī Ācārya.¹²⁴

Contents¹²⁵

This modern compilation consists of nine chapters (adhyāya) and nine appendices (pariśiṣṭa).

Chapter one (rasavijñānīya; 58 verses) gives an account of mercury, its impurities (doṣa),¹²⁶ eight saṃskāras, the preparation of mercury from cinnabar (hiṅgula), some rasayogas, cinnabar, and girisindūra.¹²⁷ Chapter two (gandhakavijñānīya; 5 verses) describes sulphur, its purification, and a recipe. Chapter three (lohavijñānīya; 186 verses) is about the dhātus:¹²⁸ suvarṇa (gold; 1–24), rajata (silver; 25–34ab), tāmra (copper; 34cd–47), pittala (brass; 48–53), kāmsya (bronze; 54–56), mākṣīka (57–72ab), tuttha (72cd–82), nīlakalka (in Hindī),¹²⁹ vaṅga (tin; 83–101ab), nāga (lead; 101cd–108ab), sindūra (108cd–109), mṛddāśrīṅga (110–112), safedā (in Hindī),¹³⁰ sauvīrāṅjana (113–115ab), yaśada (zinc; 115cd–120ab), puṣpāṅjana (120cd–121), rasaka (122–128), loha (iron; 129–147) and maṇḍūra (148–151ab), vimāla (151cd–156), kāśīśa (157–164ab), gairika (164cd–168), gile armanī (in Hindī),¹³¹ gile makhtūm (in Hindī),¹³² abhraka (169–182ab), and ayaskānta (182cd–186). Chapter four (mallavijñānīya; 15 verses) is concerned with malla or gaurīpāśāṇa

(1–4ab), haritāla (4cd–11), and manaḥśilā (12–15). Chapter five (sudhāvijñānīya; 9 verses) describes sudhā (1–4ab),¹³³ khaṭikā (4cd–5ab),¹³⁴ godantī (5cd–9),¹³⁵ and safed surmā (in Hindī).¹³⁶ Chapter six (sikatāvijñānīya; 5 verses) is about sikatā (1–4), dugdhapāśāṇa (5),¹³⁷ kauṣeyāśman,¹³⁸ nāgapāśāṇa,¹³⁹ and āśma-bhid (in Hindī).¹⁴⁰ Chapter seven (lavaṇakṣāravijñānīya; 28 verses) is devoted to salts (1–17: saindhava, sāmadra, romaka, viḍa, sauvarcala, and audbhida lavaṇa) and alkalis (18–28: yavakṣāra, svarjikā, taṅkaṇa, sphaṭikā,¹⁴¹ parpatākṣāra¹⁴² and saurakṣāra).¹⁴³ Chapter eight (ratnavijñānīya; 24 verses) is concerned with the ratnas: māṇikya (1), nīla (2), puṣparāga (3), gomeda (4), vaidūrya (5), tārksya (6), and vajra (7–9), their purification and killing (10–12), and the uparatnas: rājāvarta (13–15), saṅgayaśab¹⁴⁴ (in Hindī), akīka (16),¹⁴⁵ sphaṭika (17), sūryakānta (18), candrakānta (19), peroja (20),¹⁴⁶ vaikrānta (21–24), and tṛṇakāntamaṇi¹⁴⁷ (in Hindī). Chapter nine (rasayogavijñānīyayoga; 222 verses) consists of sixty-six formulae.¹⁴⁸ The pariśiṣṭas are about the preparation of bhasman and about puṭa (1; in Hindī), about capala (2), śilājatu (3), mākṣika and vimāla (4; in Hindī), rasāṅjana (5; in Hindī), the doṣas of impure dhātus (6), sattvapātana (7), and the purification of some viṣas (8). The last pariśiṣṭa (9) consists of a list of substances which are important in rasaśāstra and mentioned in the *Caraka-* and *Suśrutasaṃhitā* (references are given).

The *Rasāmṛta* is restricted to iatrochemistry, which explains that only the first eight saṃskāras of mercury are dealt with. Anuvāsana is omitted.

The sources are listed in the author's prastāvanā and often indicated in the text of the treatise.

These sources consist of: *Aṣṭāṅgasamgraha*, *Āyurvedaprakāśa*, *Bhaiṣajyaratnāvalī*, *Bhāratiyarasaśāstra* by Vāman Gaṇeś Desāi,¹⁴⁹ *Carakasamhitā*, *Lohasārvasva*, *Paribhāṣākhanda*,¹⁵⁰ *Rasahrdaya*, *Rasapaddhati*, *Rasaprakāśasudhākara*, *Rasaratnasamuccaya*, *Rasasāra*, *Rasatarāṅgiṇī*, *Rasendracūḍāmaṇi*, *Rasendrasārasamgraha*, *Ratnapradīpa* by Mahādeva Lakṣmaṇa Khāmbeṭe,¹⁵¹ *Suśrutasaṃhitā*, *Yogaratanākara*, and *Yūnānī Dravyaguṇavijñāna* by Daljīṭ Siṃha.¹⁵²

Sources not listed by the author, but referred to in his treatise, are: *Bhāvaprakāśa* (6.2ab), *Dhanvantariyanighaṇṭu* (6.1; 7.4–5ab and 20), *Gadanigraha* (6.2cd–4), *Rājanighaṇṭu* (3.166cd–167ab; 7.6cd–7ab), *Rasārṇava* (3.64cd–65ab, 122cd–123), *Rasasamketakalikā* (9.55–56), *Śārṅgadharasaṃhitā* (9.151–158ab), *Siddhabhaiṣajyamañjūṣā* (9.132–134), *Siddhabheṣajamaṇimālā* (1.46; 4.8; 8.16; 9.183–185), and *Vaidyājīvana* (9.167).

The *Rasāmṛta* is quoted in the commentaries on the *Āyurvedaprakāśa* of Guṇrā-jārmamiśra and Somadevaśarman; it is one of the sources of the *Bheṣajasaṃhitā*.

Chapter 7

Rasapaddhati to Rasaratnadīpikā

Rasapaddhati

The *Rasapaddhati* by Bindu¹ is a short work in 231 verses² on alchemy and iatrochemistry.

Contents³

The *Rasapaddhati* can conveniently be divided into two sections: 12–132, devoted to alchemy, and 133–231, devoted to formulae against diseases.

The maṅgala is addressed to Śiva as Ardhanaṛīṇaśeṣvara.⁴ Three systems of therapy are distinguished, hierarchically arranged: daivī cikitsā, the superior system, which employs well-prepared rasas; mānavī cikitsā, treatment by means of vegetable preparations; āsurī cikitsā, the inferior method, making use of surgical procedures (2–3).⁵ The seven doṣas of mercury are enumerated: nāga, vaṅga, viṣa, mala, capalatā, vahnija, and girija, and the disorders caused by them (4). The eight saṃskāras which are necessary for medical purposes are listed (5) and described (6–14), followed by some alternatives for those without the means to carry them out (15–17). The preparation of mercury from cinnabar is discussed (18).

Subjects dealt with in the next verses are: the purification of the metals (loha; 19–20); the preparation of the bhasman of gold (21–23ab), silver (23cd), iron (24–25), copper (26–30), lead (31–32ab), tin (32cd–34), and the alloys (35); the medicinal properties of these bhasmans (36–37). Verses 38–54 are about the six mahārasas: vaikrānta, gagana (= abhṛaka), śilāja (= śilājatu), capala, tāpīja (= vimalā and māḥṣika), and tuttha. Verses 55–58 are concerned with the uparasas: gandha, (hari)tāla and manahśilā. The saṃskāras which are necessary for vedha (transmutation) are described in verses 59–60ab (jāraṇā), 60cd–62ab (cāraṇā), 62cd–63 (sāraṇā), 64–66 (mukhabandha), and 67–74 (krāmaṇa and vedha). Verses 75–79 deal with the processes to which mercury obtained from cinnabar has to be subjected in order to attain vedha, verses 80–82 with mukhakarāṇa by means of jāraṇā of sulphur, verses 83–87 with ways of preparing rasasindūra and rasakarpūra.

Relatively much attention is given to the gems (88–132). Nine gems are enumerated: vajra, vidrūma, mauktika, marakata, vaidūrya, gomēdaka, māṇikya, harinīla, and puṣpadṛṣṇa (= puṣparāga) (88); their connections with the nine grahas are explained (89–90). The origin of diamonds is described (91–95), their varieties are dealt with (96–99ab), their blemishes (99cd–102), their properties (103), the regions where they are found (104),⁶ their weights and prices (105–112),⁷ and their examination (113–

116). Pearls (mauktika) and their varieties are elaborately described (117–132); eight types are distinguished, originating respectively from elephants (karin), boars (kiri), bamboos (tvaksāra), fishes (matsya), clouds (ambumuc), shells (kambu), serpents (urogati), and oysters (śukti).⁸

Verses on the treatment of raktapitta (133–137ab), kāsa, śvāsa and hikkā (137cd–139), rājayakṣman (140–147ab), and some other diseases (147cd–149) follow. The last part of the treatise (150–231) contains formulae of rasayogas, mainly to be prescribed against fevers.

Sources are not referred to.

Authorities mentioned are: Agastya (147), Ātreyaśūri (193),⁹ Bhāluki (54),¹⁰ Candraśikhara (199),¹¹ Nāgārjuna (155),¹² Vasiṣṭha (147), and Viṣṇu (160).¹³

The *Rasapaddhati* is quoted or referred to in the paribhāṣā pariśiṣṭa of the *Ānandakanda*, *Āyurvedābhdhisāra*, *Āyurvedaprakāśa*, *Bṛhadrasarājasundara*, *Dhātumārāṇa*,¹⁴ *Gulrājāsarmamīśra*'s commentary on the *Āyurvedaprakāśa*, *Harīśaraṇānanda*'s *Kūpīpakvarasanirmāṇavijñāna*, *Hazārīlāl Sukul*'s commentary on the *Rasaratnasamuccaya*, *Pāradasaṇhitā*, *Rasakāmadhenu*, *Rasasiddhiprakāśa*,¹⁵ the commentary on the *Rasataraṅgiṇī*, *Rasatattvavivecana*, *Rasavidyāmahārṇava*, *Rasayogasāgara*, *Rasendrapurāṇa*, *Somadevaśarman*'s commentary on the *Āyurvedaprakāśa*, and *Yādavjī Trikaṃjī*'s *Rasāmṛta*.

Bindu is quoted in *Hazārīlāl Sukul*'s commentary on the *Rasaratnasamuccaya*. The *Rasapaddhatikṛt* is quoted in the commentary on the *Āyurvedābhdhisāra*.

Special features

Anuvāsana is not described as a separate saṃskāra.¹⁶

The metals enumerated are gold, silver, iron, copper, lead (uraga), tin (raṅga), ghana (= kāmśya), vartula,¹⁷ and ghoṣa;¹⁸ the last three items of this series are called upaloha; iron is of three types: kānta, tīkṣṇa and muṇḍa (19). Zinc is not mentioned.¹⁹ The term dhātu is not employed for the metals.

The mahārasas are only six in number (38); the inclusion of capala and tuttha is noteworthy. Vaikrānta is of seven types, but only the black variety, used in alchemical operations, is taken into consideration (38).²⁰ The usual four varieties of mica are described (40). Śilājatu is of two types: acalodbhūta²¹ and uṣodbhava²² (44). Capala is of four varieties: white, black, yellow and red (46).²³ Tāpīja is of two types: vimala²⁴ and māḥṣika. Vimala is of three varieties: hema-, tāra- and kāmśyavimala²⁵ (48). Māḥṣika is of two varieties: svarṇa- and rajatamāḥṣika; some are said to distinguish a third variety, called kāmśyamāḥṣika (49). Tuttha is of two varieties: mayūra- and kharparatuttha (51). The uparasas are only three in number: gandhaka, haritāla and manahśilā (55). Three varieties of sulphur (gandhaka) are described: yellow, red and white;²⁶ the white variety is sometimes called khaṭṭi;²⁷ names of the yellow variety are āmalakacchavi, dṛṣṭagandhaka and lavaṇaka (55). The two usual varieties of haritāla are mentioned: patṭrin and piṇḍa (57). Manahśilā is of two varieties: śyāmāṅgī and kaṇavīrikā (58).²⁸

The list of saṃskāras necessary to achieve vedha is short (59–74); mukhabandha is regarded as a distinct saṃskāra; the two types of druti are not mentioned.

The five blemishes of diamonds are: bindu, kākapada, yava, mala and rekhā

(99–102ab).²⁹ Eight regions are mentioned where diamond mines (khani) are or were found: Kośala and Kāliṅga in the Kṛtayuga, Vaṅga and Mālava in the Tretāyuga, Saurāstra and Maṇipuṇḍra in the Dvāparayuga, Sopāra³⁰ and Vajrākara³¹ in the Kaliyuga.³² Pearl oysters are said to be found in the seas near Ādāya, Barbara,³³ Āralāṭa, Siṃhala, Ūrmija and Pārasika (129).

The verses on the treatment of various diseases mention syphilis (phiraṅgavā-tajānitasphoṭa and phiraṅgābhīdhavāta) and rasakarpūra, the drug preferentially prescribed against this disease (149).

Some of the rasayogas in the last part of the *Rasapaddhati* are not found in other treatises; examples are ātanikāntakarasa (154cd–155) and ekasūteśvararasa (173–174).³⁴ The gaurīyantra is referred to (71; 80). A substance called lohakarpara is mentioned (13).³⁵

Noteworthy plant names are jambha (18, 21, 23),³⁶ jambhala (17),³⁷ mānavī (8), nīravānīra (24),³⁸ śitidhūrta (12), and sṛṣṭyambujā (8).

The author

Bindu mentions his name in the introductory verse.

Date

The references to syphilis and its treatment with rasakarpūra indicate that the *Rasapaddhati* is later than the *Bhāvaprakāśa* (second half sixteenth century), which describes phiraṅgaroga and its therapy for the first time in Indian medical literature. The *Rasapaddhati* may date from the first half of the seventeenth century, because it is one of the sources of the *Āyurvedaprakāśa* and since the earliest MS³⁹ was completed in A.D. 1664.⁴⁰

Commentary

A commentary on the *Rasapaddhati*, reaching up to verse 186, was written by Mahādeva.

Authorities and works quoted or referred to in the commentary are: Amara (1, 6, 7, 8, 89, 90, 98, 104, 150, 152–153, 153–154), *Aṣṭāṅghṛdaya* (1), Caraka (45cd), *Rājamrgāṅka* (87), *Rasarājyalakṣmī* (83), *Rasaratnākara* (6, 7, 8, 9, 10, 11, 13, 14, 58, 59–60ab, 61–62ab, 69–74, 80, 85–87), *Rasaratnasamuccaya* (9, 117–122, 129–132), *Rasavāgbhaṭṭa* (81–82), Somanātha (29–30), and Vāgbhaṭa (44–45ab, 45cd).

Many quotations are not referred to their source.⁴¹ Mahādeva quotes (ad 85–87) a list of divyauśadhis from a source not mentioned by name.⁴² He enumerates the following uparatanas (ad 88): vaikrānta, sūryakānta, rājāvarta, lāla,⁴³ and peroja.

The ūkā of the *Rasapaddhati* and its author are quoted in the commentaries of Gulrājsarmamiśra and Somadevaśarman on the *Āyurvedaprakāśa* and in the *Rasakāmadhenu*. The commentary on the *Rasapaddhati* is one of the sources of Hariśaraṇānanda's *Kūpīpakvarasanirmānavijñāna* and Mādhava's *Āyurvedaprakāśa*. Mahādeva is quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Mahādeva is regarded as the son of Bindu.⁴⁴ Both father and son may have been residents of Mahārāṣṭra.⁴⁵ Mahādeva is later than Nityanātha, who wrote the

Rasaratnākara, and Vāgbhaṭa, to whom the *Rasaratnasamuccaya* is attributed, because the works of these authors are quoted by him; he is also posterior to Bindu, on whose treatise he commented. He is earlier than Mādhava, the author of the *Āyurvedaprakāśa*, who used Mahādeva's work as one of his sources. This evidence establishes that Mahādeva lived, like Bindu, in the first half of the seventeenth century.

Rasapradīpa

An anonymous *Rasapradīpa*⁴⁶ in 282 verses describes both a number of iatrochemical formulae and a series of alchemical procedures.

Subjects dealt with are: a definition of rasāyana (1); fifty formulae (2–163);⁴⁷ the preparation of a bhasman of gold, silver, copper, brass (pittala), bronze (kāṁsya), lead, and tin (164–199); four methods of lohamāraṇa (200–207); māraṇa of the seven metals (dhātu; 208);⁴⁸ an enumeration of the seven upadhātus: māksika, tutthaka, abhra, nīlānjana, (manah)śilā, ālaka (= haritāla), and rasaka (209);⁴⁹ śodhana and māraṇa of the upadhātus, and of gairī, kāsīsa, ṭaṅkaṇa, varāṭikā, tuvarī, śaṅkha, and kaṅkuṣṭha (210–228); śodhana of all the dhātus (229–231); śodhana and māraṇa of hīraka (diamond), vaikrānta, maṇi, muktā (pearl), and pravāla (coral) (232–243); śodhana and māraṇa of all the ratnas (244); the śodhana of śilājatu (245–250); the preparation of maṇḍūrabhasman (251–253) and two varieties of kṣāra (cūṛṇābha or pratisārya and peya) (254–256); formulae of rasayogas (257–277); dietary and other rules (278–282).

Sources are not mentioned. One of the formulae (144–148: vyādhiharasūtanirmānavidhi) is ascribed to Pūjyapāda. The date of composition and the author are unknown.

Rasaprakāśasudhākara

The *Rasaprakāśasudhākara* by Yaśodhara⁵⁰ is a treatise devoted to alchemy and iatrochemistry.

Contents⁵¹

The *Rasaprakāśasudhākara*, entirely written in verse, consists of 1,286 verses, arranged in thirteen chapters (adhyāya).

Chapter one (aṣṭādaśarasasaṁskāranirūpaṇa; 164 verses) opens with a maṅgala of four verses in praise of Harihara, Śaradā, Gaṇapati, and mercury. These stanzas are followed by a table of contents (5–12). Subjects dealt with in the next verses are: the origin of mercury and its varieties (13–21), the eighteen saṁskāras (22–25ab), the five doṣas (25cd–26) and the seven kaṅcukas (27–30ab) of mercury. The remaining part of chapter one gives an account of the eighteen saṁskāras: svedana (30cd–35), mardana (36–41), murchana (42–45ab), utthāpana (45cd–47), the three varieties of pātana (48–62ab), rodhana (62cd–65), niyamana (66–67ab), dīpana (67cd–78), grāsamāna (79–83),⁵² cāraṇa (85–93ab), garbhadruti (93cd–97ab), bāhyadruti (97cd–101ab), jāraṇa (101cd–119), rañjana (120–127), sāraṇa (128–140ab), krāmaṇa (140cd–146ab), vedhana (146cd–156), and sevana (157–164).

Chapter two (caturvidharasabandhana; 109 verses) enumerates four types of

bandha of mercury:⁵³ jalaukā- or pakvabandha, kṛṣṇa(ka) or piṣṭistambha, pātaka⁵⁴ or parpaṭikābandha, and bhasmabandha (2–3). These bandhas may be brought about by means of mūlikā (substances of vegetable origin), maṇi (gems), svarṇaka (gold), and lead (nāga) or tin (vaṅga); bandha by means of gold is called dhātubandha;⁵⁵ the merits of these methods decrease in the mentioned order (4–5). A fifth method, drutibandha, is regarded as superior, in particular if abhradruti is employed in the process (6). Five varieties of mūlikābandha are described (7–35), two types of maṇibandha (employing vajrasattva and vajrabhasman; 36–50ab), three types of drutibandha (employing abhrakadruti, hemadruti and vajradruti; 50cd–70ab), and five varieties of dhātubandha (employing gold, silver, tūtthaka, tin, and a mixture of substances; 70cd–107).

Chapter three (sūtabhasmakathana; 64 verses) is concerned with the preparation of mercurial ashes (sūtabhasman), four varieties of which are distinguished: white, black, yellow, and red (1). The chapter describes the preparation of mercury from cinnabar (2–5), the preparation of rasakarpūra (6–10ab), udayabhāskararasa (10cd–14),⁵⁶ raktarasa (15–18), and rasamāṇikya (19–22), the jārāṇa of sulphur (23–26), the preparation of rasapoṭṭālī (27–31ab), kṛṣṇabhasman (the black type; 31cd–35), śuddharasabhasman (36–38), rasaparpaṭī (two varieties; 39–58ab),⁵⁷ and some more varieties of rasabhasman (58cd–63).

Chapter four (dhātuśodhanamāraṇanirūpaṇa; 120 verses) is concerned with the purification and killing of the metals (dhātu or loha). The metals are said to be eight in number, but nine of them are enumerated: gold and silver, called śuddhaloha; copper and iron, called aśmasāra; lead and tin, called pūtiloha; saurāṣṭra (= kāmśya), rīti (= pītāla) and vartaka, the three alloys (saṃmīśraloha) (2–4ab). Various methods of purifying the metals and killing them are described. Two varieties of gold are distinguished, rasaja and khaṇisambhava, although three more varieties are referred to (4cd–5ab). Silver is of three types: khaṇija, sahaja and kṛtrima (21), copper of two types: nepāla and mleccadeśaja (35cd). Iron is of three types: kānta, tīkṣṇavara and muṇḍa; four varieties of kāntaloha are described: romaka, bhrāmaka, cumbaka and drāvaka (57–62). Tin is of two types: khura and mīśra (79ab). Two types of pītāla are described: rītīkā and kākatuṇḍikā (105cd–106). Kāmśya is characterized as an alloy of copper (ravi) and tin (trapu) in a ratio of four to one (112cd–113ab), vartaloḥa as an alloy of iron, kāmśya, copper (arka) and rīti (= pītāla) (116ab); vidāloḥa is mentioned as a synonym of vartaloḥa (116cd).

Chapter five (mahārasanirūpaṇa; 132 verses) is about the mahārasas, their names and varieties, their purification, killing and sattvapātana (the extraction of their essences). Eight mahārasas are listed: gagana (= abhṛaka), rasaka, tāpya (= mākṣika), vaikrānta, vimāla, sasyaka,⁵⁸ śailasambhūta (= śilājatu) and rājāvartaka (2–3ab). Four varieties of mica (abhṛaka) are described: vajra, pināka, nāga and maṇḍūka (3cd–7). Vaikrānta is of eight varieties (62); vimāla is of three types (80–81ab). Two varieties of śilājatu are distinguished: gomūtra and ghanasāra (90cd);⁵⁹ a third one is added, called karpūraśilājatu, which differs from the other varieties because its killing and the extraction of its essence are not described by the experts (104–105).⁶⁰ Two varieties of rasaka are mentioned: kāravella and dardura⁶¹ (106),⁶² and two varieties of mākṣika: rukmamākṣika (= suvarṇamākṣika) and tāpya (121–122).⁶³

Chapter six (91 verses) deals with the eight uparasas, their varieties, properties, purification and essences (sattva). The eight uparasas are: tālaka, tuvarī, gandha (sulphur), kaṅkuṣṭha, kunaṭī (= manaḥśilā), gairika, añjana and kāsisa (1). Two varieties of tālaka are distinguished: dalākhyā and aśmasaṃjñaka (2),⁶⁴ two varieties of saurāṣṭrī (= tuvarī): pītīkā and phullīkā (11cd–13),⁶⁵ three varieties of manaḥśilā: śyāmā, rakṭā⁶⁶ and khaṇḍīkā (17–18), five varieties of añjana: sauvīra, rasāñjana, sroto'ñjana, puṣpāñjana and nīlāñjana (23),⁶⁷ four varieties of gandhaka (sulphur): śveta, pīta or amlasāraka, rakta or śukatuṇḍa, and kṛṣṇa (29cd–32),⁶⁸ four varieties of kaṅkuṣṭha: nalika, reṇuka, the excrements of a female elephant that has just brought forth (sadyahprasūta), and the nāla (umbilical cord) of a horse (54–58ab),⁶⁹ two varieties of kāsisa: saikata and puṣpākhyā (63–65ab),⁷⁰ and two varieties of gairika: pāṣāṇagairika and svarṇagairika (70–71ab).⁷¹ The same chapter is concerned with navasāra or cullikā (74–75), biḍa (76ab), three varieties of varātīkā, differing in weight (76cd–80), agnījāra (81–82), girisindūra (83–84), two varieties of cinnabar (darada): śukatuṇḍa or carmāra and haṃsapāda (85–89ab), and, finally, mṛddāśāṣṭrīgaka (89cd–90).

Chapter seven (66 verses) describes the precious and semi-precious stones (ratna), their varieties, qualities and defects;⁷² the purification and killing of diamonds are dealt with, as well as the purification and druti of all the gems mentioned. The ratnas described in chapter seven are: māṇikya (ruby) and its two varieties, called padmarāga and nīlagandhi (3–7), mauktika (pearl; 8–10), vidrūma (coral; 11–13), tārṅkṣya (emerald; 14–16),⁷³ puṣpaka or puṣparāga (topaz; 17–19), vajra (diamond) and its varieties (20–27), nīla (sapphire; 45cd–49),⁷⁴ gomeda (50–53), and vaidūrya (54–56).

Chapter eight (śatarasanirūpaṇa; 276 verses), the longest, contains 103 formulae of rasayogas, to be employed against various diseases.

Chapter nine (divyauśadhyādinirūpaṇa; 39 verses) contains lists of the sixty-four divyauśadhis (1–12ab), sixty-eight rasauśadhis (12cd–22ab), sixty-eight mahaśadhis (22cd–30ab), and sixty-eight rasādhikamahauśadhis (30cd–39).

Chapter ten (yantrādinirūpaṇa; 54 verses) contains a list of the names of forty yantras:⁷⁵ adhaḥpātana, antarālikasaṃjñika, bhairava, bhasmayantra, bhūdhārābhidha,⁷⁶ cipiṭākhyā, ḍamaruka, devāhvaya, ḍhekyākhyā, dhūpayantra, dīpikāhvaya, dolā, gandhapīṣṭakayantra, garbhayantra, ghāṇikāyantra, ghaṭīyantra,⁷⁷ grastāhvaya, guhya, haṃsapākābhidha,⁷⁸ iṣṭikāyantra, jalayantra, khalva, kinna-ra, koṣṭhikākhyā, kuṇḍasaṃjñika, kūpīyantra, lavaṇa(yantra), nābhiyantra, nigaḍa, palabhaḥīyantra, pālīkākhyā, pātāla,⁷⁹ sāraṇāyantra, somānala, sthālīyantra, tīryakpātana, tulābhidha, ūrdhwapātana, vālūkāyantra, and vidyādhara (2–8).⁸⁰

This list is followed by a verse with the synonyms of mūṣā (9–10ab) and descriptions of various types of mūṣā:⁸¹ yoga-, gāra-, vara-, varṇa-, rūpya-, biḍa-, vajra-, vṛntāka-, gostaṇī-, malla-, pakva-, mahā-, mañjūṣa-, garbha-, and muṣālamūṣā (10cd–28). The chapter continues with descriptions of a number of types of koṣṭhikā: āṅgāra-, pātāla-, gāra-, and tīryakpradhamaṇakōṣṭhikā (29–40). It ends with the characteristics of various types of puṭa: mahā-, gaja-, vārāha-, kukkuṭa-, kapota-, govāra-, mṛdbhāṇḍa-, vālūkā-, bhūdhara-, and lāvakaṭa (41–54).

Chapter eleven (dhātukautukanirūpaṇa; 135 verses) is mainly concerned with auri- and argentification; eighteen ways of making artificial gold (hemakriyā) and

seventeen ways of making artificial silver (tārakriyā) are described, as well as some methods to improve the grade of artificial gold (varṇotkarṣakriyā). Additional subjects are the making of artificial pearls, increasing the size of small pearls, and the making of artificial coral.

Chapter twelve (vājīkaraṇa; 20 verses) contains aphrodisiac formulae.

Chapter thirteen (śukra- or vīryastambha; 16 verses) contains recipes that suppress ejaculation (1–13), followed by some concluding verses.

Authorities and works referred to are: Bhairava (7.26; 8.120), *Devīśāstra* (1.27; 2.100),⁸² Manthānabhairava (8.173–174), Nāgārjuna (5.107), Nandin (6.73), Nandirāja (1.145), *Prakāśamṛta* (8.275), Somadeva (7.37; 9.11),⁸³ and Svachandabhairava (8.132–133). P. Rāy⁸⁴ asserted that the *Rasārṇava* is quoted in the *Rasaprakāśasudhākara*.⁸⁵

A Yaśodhara is one of the Rasasiddhas in the Vādikhaṇḍa of the *Rasaratnākara* (1.67). Yaśodhara is said to be the same as the Yaśodhana of the *Rasaratnasamuccaya*.⁸⁶

Yaśodhara is quoted in Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*. He is cited as Padmanābhasūnu in Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa* and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

The *Rasaprakāśasudhākara* is quoted or referred to in the prakṛīka paṇiṣṭha of the *Ānandakanda*, the *Dharaṇīdharasamhitā*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Pāradasamhitā*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, the bhasmapīṣṭhīprakarāṇa of the *Rasoddhāratāntra*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*; it is one of the sources of the *Bheṣajasaṃhitā*, Hariprapanna's *Rasayogasāgara*, Hariśaraṇānanda's *Kūpīpakvarasanirmānavijñāna*, the *Rasavidyāmahārṇava*, the *Rasoddhāratāntra*, and Yādavajī's *Rasāmṛta*.

Special features

The *Rasaprakāśasudhākara* is a conveniently arranged and orderly work, chiefly composed by the author himself. Yaśodhara is a remarkable writer, who, repeatedly, without wasting words, makes clear which parts of his treatise derive from earlier works⁸⁷ and which parts are based on his own experience⁸⁸ or that of his teacher.⁸⁹

Yaśodhara was obviously interested not only in alchemy for its own sake, but also in the medicinal uses of alchemical products. The medicinal properties and actions of many substances are recorded in detail, while chapters three, eight, twelve and thirteen mainly consist of recipes and their indications.

Yaśodhara does not describe the alchemical laboratory, its apparatus, implements, etc., giving only a list of yantras, etc., in chapter ten. However, the characteristics of a few yantras occur in chapter one: khalva (1.37cd–39), ūrdhvaṇḍānayantra (1.50–56ab), adhaṇḍānayantra (1.56cd–58ab), tiryakṇḍānayantra (1.58cd–62ab), jalayantra (1.87–91),⁹⁰ and sāraṇānayantra (1.128–140ab).

Chapter one refers to a utensil called karoṭī (1.85),⁹¹ to vahnimṛttikā (1.90),⁹² ghoṣākṣṛta (1.94),⁹³ and nīlakalka (1.106–107ab). The same chapter distinguishes

five kinds of vedha, called lepa-, kṣepa-, kunta-, dhūma-, and śabdavedha (1.146cd–156).⁹⁴ The verses on the use (sevana) of mercurial preparations (1.157–164) do not refer to the inherent dangers.

Chapter five does not mention capala as one of the mahārasas, whereas rājāvarta is included in this group. The amṛtikaraṇa of killed mica (mṛtābhra) is not described. Eight varieties of vaikrānta are mentioned; karbura is added to the more usual list of seven varieties.⁹⁵ The description of the extraction of the essence (sattva) of rasaka (5.112–116) is regarded as a process to win zinc from its ore; the sattva is said to resemble lead (śīsa).⁹⁶

Chapter six contains accounts of substances usually regarded as sādhanārasas.⁹⁷ Some of these substances are: agnijāra (6.81),⁹⁸ girisindūra (6.83), and mṛddāraṣṭṛṅgaka (6.89).⁹⁹ Kampillaka and gaurīpāṣāṇa are not dealt with.

Chapter eight frequently employs the term jūrti for fever,¹⁰⁰ although the more usual jvara is used as well. A disorder arising from the abuse of opium is referred to (8.39). The formula of rāmabāṇarasa associates agnimāndya with Daśavakra, i.e., Rāvaṇa, saṃgrahaṇāgrahaṇī with Kumbhakarṇa,¹⁰¹ and āmavāta with Khara and Dūṣaṇa.¹⁰² Contrary to usage, the formulae of the rasas of chapter eight are not attributed to divine authorities and ancient sages.¹⁰³

The list of sixty-four divine herbs (divyauśadhi) of chapter nine is based, as Yaśodhara himself indicates, on Somadeva's *Rasendracūḍāmaṇi*. The source or sources of the lists of rasauśadhis, mahauśadhis and rasādhikamahauśadhis remain unknown.¹⁰⁴

The sixty-eight rasauśadhis are: ajamāri, alambuṣā, aparājita, ardhacandrā, ativiśā, bhārgī, brhātī, candrodakā, cificā, citrapālikā, durālambhā, durgandhā, garuḍī, gojihvā, guḍūci, haṃsapādī, hariṇī, hemapuṣpī, īśvarī, jalakumbhī, jalamūlakā, jalāpāmārga, jalapippalikā, jālinī, jalotpalā, kāsmārī, kukkuṭā, lāṅgalī, mālarjūnī, māmsikā, maṇḍūkī, mañjiṣṭhā, markasphoṭī, meghanādā, mohinī, mūrvā, muśalī, nandinī, pāgava, pāṣāṇī, pātālā, paṭolī, potakī, rasā, rasacitrā, samaṅgā, sārīvā, sarpākṣī, śāthikā, śikhipādī, śīśikā, sitagandhinī, śṛṅgī, sthalasārīṇī, śukanāsikā, tiktikā, tulasī, tuṣāmbukā, uttamā, vajrakandikā, vanakūṣmāṇḍavallikā, vanamālī, varāhī, vāsā, veṇukā, vidārī, viśaghnī, and vṛścikālī (9.12cd–22ab).

The sixty-eight mahauśadhis are: adhoguptā, ajagandhā, ajamodikā, āmalī, amlikā, āsurī, āsvagandhā, atibālā, bākucī, balā, bimbī, dantī, dhātakī, drākṣā, dravantī, dūrvā, elā, gavākṣī, girikarṇikā, grīṣma, hapuṣā, jantupādī, jāti, jyotsnā, kadaṇī, kākāvā, kāsamardikā, kekicūḍā, kharjūrī, lakṣmaṇā, mahābalā, mallikā, nāgabālā, nalikā, nālikerī, nirguṇḍī, nīlinī, nīlotpalā, phalgu, prasārīṇī, prthvī, rāsnā, riddhi, śālmālī, śamī, śāṅkhapuṣpī, śarapuṣpikā, sārīvā, sātalā, śatapuṣpā, śatāvarī, śiṃśī, sinduvāra, śoṣiṇī, śrāvaṇī, svarṇakṣīrī, taruṇī, tejovatī, trāyamāṇā, trivṛt, tugā, varā, varṣā, varṣābhū, vāṣṭī, viśālā, viṣāṇī, and yūthikā (9.22cd–30ab).

The sixty-eight mahauśadhis which are rasādhikā consist of: adhaṇḍā, ajagandhā, ambumūlikā, arkavallikā, aṣṭavallī, āsurī, āsvinī, avantī, bhrīgavallī, bhrīgī, cakravallī, chidralambikā, devagandhārī, devī, dugdhikā, gajapippalikā, gaṇgeṭī, grāhanakṣī, grājānī, haṃsapādikā, īṅgudī, īśvarī, jambīravallikā, jantukārā, jārāvalī (or jarāvallī), jayantikā, kākāṇḍolā, kālavaraṇā (latā), kāmbujī, kāñicanī, kanyā, karavīrā, kṣāṭhagandhamatī, khotakā, kṣetrī, kṣutkārī, kuberākṣī, mahārāṣṭrī, mayūrākhyā, nāhī,

nākulī, nārācī, palāsatilakā, palāśinī, panasī, parpaṭī, rajanī, rājapadmā, rājasamī, rohitā, sahadēvī, śallakī, samvīrā, śarapunkhikā, sarpadaśā, siddheśvarī, śigruvallī, śirphikā, śivāṭikā, somarājikā, śṛṅgarīṭikā, śṛṅkhalā, tāmraṅgikā, tauvarī, tuṭumbhaṭī, vaṅgajā, vijayā, and viśakharparikā (9.30cd–39).

Some names of yantras listed in chapter ten are less common or unusual: cipiṭa-yantra,¹⁰⁵ bhairavayantra, nigaḍayantra, sāraṇayantra,¹⁰⁶ guhyayantra, gandhapiṣṭaka-yantra, kūpiyantra,¹⁰⁷ devayantra, and ghāṇikāyantra. The description of the jalayantra differs from that of related yantras in other texts.¹⁰⁸

Some noteworthy names of plants and substances of vegetable origin (apart from those found in chapter nine) are: ākallaka (8.32 and 36), dvīpāntarotthā (8.36),¹⁰⁹ karabha (13.2), karahāṭa (13.9 and 11),¹¹⁰ khurāsānī (13.1), loṭṭāka (8.264),¹¹¹ mastakī (13.1), posta (13.8), postaka (13.13), rāgiṇī (11.6), śvetāmbarī (8.265), and trinemī (11.6). Opium is frequently found in Yaśodhara's materia medica.¹¹²

Cinnabar originating from Western countries (romadeśīya) is referred to (11.9).

The author

Yaśodhara mentions in the concluding verses of his treatise his own name, Yaśodhara or Bhaṭṭayaśodhara, the name of his father, Padmanābha, who was a brāhmaṇa of Śrī-gauḍa lineage, and the place of his residence, the walled town (prākāra; durga) called Jīrna, located in Surarāṣṭra.¹¹³ Yaśodhara, who calls himself a kavi and kavivara, adds that his father was a devotee of Viṣṇu.¹¹⁴

Date

The references to Somadeva, the author of the *Rasendracūḍāmaṇi*, establish that Yaśodhara is later. Prafulla Chandra Rāy¹¹⁵ was of the opinion that the observations on the metallurgy of zinc, found in the *Rasaratnasamuccaya*, were based on similar observations in Yaśodhara's work.¹¹⁶ This hypothesis, which makes the *Rasaprakāśasudhākara* into an earlier work than the *Rasaratnasamuccaya*, was accepted by a number of subsequent scholars.¹¹⁷

Most scholars, being convinced that the *Rasaprakāśasudhākara* is posterior to the *Rasendracūḍāmaṇi* and anterior to the *Rasaratnasamuccaya*, assign the work to the thirteenth century.¹¹⁸

Actually, Yaśodhara belongs to a later period, because he was acquainted with the drug usually called cobacīnī, but referred to in the *Rasaprakāśasudhākara* as dvīpāntarotthā (8.36).¹¹⁹ This drug, of foreign origin, as indicated by its name, was introduced by the Portuguese in the sixteenth century.¹²⁰ In agreement with this date is the description of rasakarpūra (3.6–10ab). Both cobacīnī and rasakarpūra were employed in the treatment of syphilis, a disease left unmentioned in the *Rasaprakāśasudhākara*, which may mean that Yaśodhara, although belonging to the sixteenth century,¹²¹ preceded Bhāvanīśra, who composed the *Bhāvaprakāśa*.¹²² This chronological position implies that Yaśodhara's work and the *Rasaratnasamuccaya* are not far removed from each other in time.

Rasarājālakṣmī

The *Rasarājālakṣmī* by Viṣṇudeva¹²³ is a treatise on alchemy and iatrochemistry.

Sources mentioned are: Ātreya, Bhagavadgovinda (the author of the *Rasahrdaya*), Bhavānīmata, Caraka, Dāmodara, Hārīta, Īśahrdaya,¹²⁴ Kākacaṇḍeśvarītantra, Nāgārjuna, Rasasāgara, Rasasudhāmbhodhi, Siddhasāra, Suśruta, Sūtamahodadhi, Svachchandaśaktyāgama, Vāgbhaṭa, Vāsudeva, Vṛnda, and Vyāḍi.¹²⁵ The *Rasārṇava* is by some added to this list.¹²⁶

G. Hāldār asserts that Rāmeśvarabhaṭṭa, Viṣṇudeva's son, wrote a commentary on his father's work.¹²⁷

The *Rasarājālakṣmī* is quoted in the *Amṛtasāgara*, *Brhadyogatarāṅgiṇī*, *Rasakāmadhenu*, *Rasasindhu*, *Rasayogasāgara*, Ṭoḍara's *Āyurvedasaukhya*, and the *Yogaratanākara*. It was one of the sources of the *Āyurvedaprakāśa*.

Subjects dealt with in the *Rasarājālakṣmī*¹²⁸ are, according to the quotations from the work: the preparation of fermented beverages (saṃdhāna),¹²⁹ the preparation of a biḍa in general¹³⁰ and of a hamsapākabiḍa,¹³¹ the liquefaction (druti) of gems,¹³² the rasas¹³³ and mahārasas,¹³⁴ the purification of uparasasattva,¹³⁵ the varieties of mākṣika,¹³⁶ capala,¹³⁷ the uparasas,¹³⁸ the properties of mūrchita and baddha mercury,¹³⁹ mūrchana,¹⁴⁰ mukhakarāṇa,¹⁴¹ jāraṇa,¹⁴² jalaukābandha,¹⁴³ and daradākṣṛṣṭi.

Formulae from the *Rasarājālakṣmī* are found in the *Rasayogasāgara* and some other treatises.¹⁴⁴

Viṣṇudeva, son of Mahādeva,¹⁴⁵ was patronized by king Bukka I of Vijayanagar (A.D. 1356–1377).¹⁴⁶

Viṣṇudeva is also called Viṭṭhala or Viṭṭhalagalaṇḍa¹⁴⁷ and his father Mahādeva-galaṇḍa.¹⁴⁸ The original place of residence of the family was Elichpur (Alasapuram).¹⁴⁹ Descendants of Viṭṭhala are said to be still living at Gulbarga in the Deccan.¹⁵⁰

Viṣṇudeva or Viṭṭhala was also the author of the *Rasasindhu*¹⁵¹ and of four medical treatises in Marāṭhī: *Hitopadeśa*, *Rasakaumudī*, *Rasaratnapradīpa*, and *Vaidyacakora-candrikā* or *Vaidyacandrakarikā*.¹⁵²

Rasaratnadīpikā

The *Rasaratnadīpikā* by Śrīvāṇeśvara Bhaṭṭācārya¹⁵³ is a collection of rasayogas, mixed with āyurvedic recipes, preceded by a short section on some alchemical operations.

Contents

The work begins with verses, mixed with prose, praising mercury, describing the doṣas of mercury and their removal, etc., followed by stanzas on the purification, etc., of the metals and sulphur (1–8).

The remaining part of the treatise contains rasayogas and āyurvedic recipes, to which glosses are added, against the diseases mentioned in the *Mādhavanidāna* and a number of disorders described in later treatises. Many formulae are ascribed to divinities and famous authorities; some are attributed to Caraka,¹⁵⁴ Hārīta,¹⁵⁵ and

Vaṅgasena.¹⁵⁶ A pariśiṣṭa deals with the three doṣas and some other general topics. The only treatise referred to is the *Rasāṇava* (4).

Special features

Noteworthy disorders mentioned are: agramāṃsa (367–368),¹⁵⁷ āhavajvara (76–81),¹⁵⁸ asthijvara (103),¹⁵⁹ and raktadhātugatadāha (103).¹⁶⁰

The section dealing with the treatment of women's diseases includes verses on disorders called bādhaka, caused by four demonic beings, dangerous to pregnant women and women in childbed, whose names are Raktamādrī, Jaṅkurī, Śaṣṭhī, and Jalakumāraka. These beings are described, together with the symptoms occasioned by their attack (409–410).¹⁶¹ This description is followed by a quotation in sixteen verses and a section in prose from the *Bhairavītantra*,¹⁶² concerned with the means of appeasing the demons mentioned (411–414).

Unusual is the presence of a number of prescriptions fathered on Sanaka (167; 174; 175; 177–178; 190; 242; 260; 332–333; 342).

Author

The author was a pupil of Harināthaśarman.¹⁶³

Date

The *Rasaratnadīpikā* was completed in 1932/33.¹⁶⁴

Chapter 8 *Rasaratnākara*

The *Rasaratnākara* by Nityanātha¹ is an important treatise on alchemy and iatrochemistry.

Contents²

The *Rasaratnākara* is divided into five sections (khaṇḍa): (I) Rasakhaṇḍa, (II) Rasendrakhaṇḍa, (III) Vāda-, Vādi- or Rddhikhaṇḍa, (IV) Rasāyanakhaṇḍa, and (V) Mantrakhaṇḍa.³

The Rasakhaṇḍa

The *Rasakhaṇḍa*⁴ (577 verses) consists of ten chapters (upadeśa).⁵ Chapter one (rasapīṭhikā; 33 verses) opens with a maṅgala addressed to Caṇḍikā (i.e., a terrific form of Pārvatī)⁶ and Candrasekhara (i.e., Śiva), followed by some verses on the five sections of the *Rasaratnākara* and those to whom they are addressed (1–6). The other subjects of chapter one are: the praise of mercury (7–14 and 23–24) and the iatrochemist (15), the usefulness of the book (16–22 and 25–26), the doṣas of naturally occurring mercury (27–29ab), the qualities of purified mercury (29cd–30), and the quantity to be taken for purification (31–33). The treatise is declared to be based on earlier works, the teachings of the author's guru and personal experience (16–22).

Chapter two (rasaśodhanamāraṇa; 46 verses) describes the purification and killing of mercury. Four kinds of bhasman are produced by these processes: white, yellow, red, and black in colour. The māraṇauśadhis are listed in this chapter (15–20).

Chapter three (māraṇa; 46 verses) is about a better method of killing mercury; this type of killing is preceded by jāraṇā and the addition of a bīja (1–2). In order to achieve jāraṇā, mercury has to be provided with a 'mouth' (mukha) first (3–7ab), which process is called mukhakarāṇa. Killing of mercury is also possible, without giving a mukha to mercury (nirmukha), by adding a biḍa; the way to prepare a biḍa is described (13cd–18). The niyāmaka plants are enumerated, employed in the māraṇa, mūrchanā and bandhana of mercury (34–41). The examination of mercurial bhasmans and their uses are dealt with (43cd–46).

Chapter four (mūrchanādinirūpaṇa; 54 verses) is concerned with the mūrchanā and bandha of mercury. The same chapter describes the preparation of haira-nyagarbhakarasa (29cd–30). The chapter ends with a verse on the daivī, mānuṣī and rākṣasī types of medical treatment (54), i.e., the treatment with rasas, with herbs and mantras, and with surgical methods.

Chapter five (vajravaikrāntaśodhanamāraṇa; 49 verses) enumerates the uparasas: gandhaka, vajra, vaikrānta, vajrābhra, ⁷ tālaka, (manah)śilā, kharpara, śikhituttha, ⁸ vimalā, hemamākṣika, kāśisa, kāntapāśāṇa, varāṭī, hingula, kaṅkuṣṭha, śaṅkha, bhūnāga, taṅkaṇa, and śilājatu (1–2). Described are the purification and killing of sulphur (gandhaka; 4–9), diamonds (vajra; 10–46) and vaikrānta (47–49), as well as the varieties of diamonds, distinguished according to their colour: śveta (= brāhmaṇa), rakta (= kṣatriya), pīta (= vaiśya), and kṛṣṇa (= śūdra), or their gender: puruṣa, strī and napuṃsaka (16–23).

Chapter six (abhrakaśodhanamāraṇa; 44 verses) gives an account of the four varieties of mica (abhraka), the purification of its best variety (vajrābhra), resulting in dhānyābhraka, ⁹ killing of dhānyābhraka, and the amṛtīkaraṇa of the bhasman.

Chapter seven (sarvoparasasattvapātana; 56 verses) deals with the purification of tālaka (1–8), manahśilā (9–12), rasaka (= kharpara; 13), tuttha (14–15), vimalā (16–18), and mākṣika (19–28); the impurities of the uparasas (called dhātu here; 29–30), the killing of coral (vidrūma; 31), the purification and killing of the eight gems and manahśilā (32–34), the purification of śaṅkha, nīlāṇjana, darada (= hingula), sauṇvira, kāntapāśāṇa, etc. (35–42), and the sattvapātana of guggulu, tālaka, (manah)śilā, mākṣika, and all the uparasas (43–56).

Chapter eight (svarṇādivaṅgāntamāraṇa; 101 verses) begins with an enumeration of the group of twelve metals and allied substances; the eight metals (lauha) consist of: gold, silver, copper, lead, tin, and three kinds of iron: kānta, tīkṣṇaka, and muṇḍa; the three alloys (upalauha) are: kāmasya, āra (= pittala) and ghoṣaka; maṇḍūra is the twelfth item (1–2). Described in this chapter are the purification and killing of gold, silver, copper, lead and tin.

Chapter nine (kāntalauhādikīṭtamāraṇa; 67 verses) is concerned with the purification, killing and amṛtīkaraṇa of the bhasman of iron (1–60), the purification and killing of the upalauhas (61–64), and the purification of maṇḍūra (65–67). One method of killing iron has been borrowed from the Siddhas (47–51ab).

Chapter ten (tailapātana; 81 verses) deals with the preparation of a large number of oils (1–27) and many other subjects: poisonous substances (28–61), the purification of bile (61), śilājatu (61–69ab and a passage in prose), substances used for bhāvanā (sālasārādigāṇa; 69cd–71), the process of bhāvanā (72–73), ¹⁰ the purification of dagdhahīraka (74), ¹¹ guggulu and its purification (75–77 and a passage in prose), and the purification of śaṅkhanābhi, varāṭī, and muktā (78–81).

The Rasendrakhāṇḍa

The Rasendrakhāṇḍa ¹² (about 5,100 verses) consists of seventy-one chapters (adhikāra), dealing with the aetiology, symptomatology and treatment of diseases, largely arranged in agreement with the *Mādhavanidāna*. ¹³ Some chapters on diseases left undescribed in Mādhava's work are added, as well as chapters on rasāyana (68), rasājīrṇa (69), and vājīkaraṇa (70).

The verses on therapy contain both āyurvedic recipes ¹⁴ and rasayogas. Glosses, explaining technical terms, names of plants, etc., are not rare.

Chapter one (jvara and jvarāfisāra; 421 verses) begins with verses said to repre-

sent Caraka's views on the catuṣpāda (the four pillars of treatment; 1–26). ¹⁵ Verses on karmaja and doṣaja disorders, the three doṣas, other constituents of the body, etc. (27–89), precede the section on the treatment of fevers (90–405) and jvarāfisāra (406–421). The chapter on raktapitta has an appendix on the purification of sulphur; it is written in verse and prose, borrowed from earlier works. The chapter on vātavyādhi has verses on the purification of substances employed in the preparation of fragrant oils (vātavyādhi 184–195) and on other subjects connected with perfumery (vātavyādhi 196–236).

Several mantras ¹⁶ and two yantras ¹⁷ are mentioned.

The author of the glosses is unknown. The majority consist of short explanations, but some are more elaborate. ¹⁸ The glossator refers to variants of the text ¹⁹ and disagreeing opinions. ²⁰

The Vādikhaṇḍa

The Vādikhaṇḍa ²¹ (2,325 verses) deals exclusively with alchemy and some related subjects. It is arranged in twenty chapters.

Chapter one (rasadīkṣā; 76 verses) is about the teacher and his pupil, the dīkṣā, and the rasaśālā (laboratory) with its inventory.

Chapter two (vargasāadhanādirasaśodhanānta; 54 verses) is concerned with the items belonging to several vargas (4–31), the vajramūṣā (31–39), the purification of mercury (39–45), the taptakhalva (46–47), and the preparation of mercury from cinnabar (48–54). The vargas mentioned are: kṣāravarga, śuklavarga (= śvetavarga), vidvarga, amlavarga, lavaṇapañcaka, kṣāratraya, mūtravarga, raktavarga, pītavarga, and the group of divine herbs (divyauśadhi).

The subjects of chapter three (vajrasodhanādidhātumāraṇa; 129 verses) are: diamonds (vajra), their varieties (2–5), their purification (6–13ab) and killing (13cd–48ab), their mṛdūkaraṇa, which makes them into what is called vajraudana (48cd–64); the purification of vaikrānta and the uparasas (65–67), the purification of sulphur (68–76) and the extraction (pātana) of its oil (77–82), the purification of tālaka, vimala, rasaka, and other substances (83–97), the preparation of dhānyābhraka (98–99), and the killing of abhraka (100–104); the purification of all the metals (105–108), and the killing of lead, iron, tin, copper, silver, gold, āra (= pittala) and ghoṣa (= kāmasya) (109–129).

Chapter four (tāraraṇjana; 163 verses) gives an account of the preparation of gandhakapiṣṭikā (2–3ab and 13–31) and svarṇapiṣṭikā (3cd–4ab), gandhakajāraṇa (4cd–8), the preparation of the gold called siddhayoga (9–12), the stambhana, jāraṇa and māraṇa of gandhakapiṣṭi (32–41ab), the preparation of artificial gold (tāravedha; 41cd–64, 74cd–77ab, 90cd–107ab, 117cd–120ab, 123cd–132, 156–163), the preparation of tārāriṣṭa ²² and its uses in making artificial gold (65–74ab, 77cd–86, 133–151), aurifaction by means of the bhasman of lead (87–90ab), the preparation of siddhacūrṇa and its uses in aurifaction (107cd–117ab and 120cd–123ab), and the turning of copper into gold (152–155).

Chapter five (varṇotkarṣaṇavarṇavivardhana; 56 verses) describes the preparation of sitasvarṇa (an alloy of gold and silver) and its turning into pure gold (2–22), the preparation of pakvabījā which turns sitasvarṇa into pure gold (23–30), the preparation

of hemaraktikā, and the improvement of the quality of gold of less than ten varṇa²³ (varṇavivardhana; 31–55).

Chapter six (rañjanādicandrārkavedhana; 125 verses) is about various methods which transmute lead (2–28ab), copper, candrārka and sitasvarṇa (28cd–125) into gold.

Chapter seven (drutasūtaprayoga; 127 verses) is concerned with processes which turn various metals into gold and with substances employed in these processes. Its subjects are: the preparation of piṣṭigola (2–9), nigāḍa (10–16),²⁴ mercurial khoṭa (17–25ab), biḍavaṭi (25cd–28ab),²⁵ drutasūta (28cd–42), and the transmutation, by means of drutasūta, of various metals into gold: copper, lead, candrārka, silver and sitasvarṇa. An additional subject is the khoṭabandha of mercury (72–73).

Chapter eight (vaṅgastambhanādidalakaraṇa; 144 verses) describes operations which turn tin and copper into silver. Additional subjects are the purification of tin (2–4) and copper (93–97).

Chapter nine (vajrayogena hemakaraṇam; 131 verses) gives an account of methods which turn various metals into gold by means of substances prepared from mixtures of diamonds and mercury or gold (dvandvakhoṭa).

Chapter ten (pakvabījāvargasādhana; 90 verses) is about the following subjects: the preparation of pakvabīja (2–8) and nāgabīja (9–12); the colouring of a bīja (13–24); the preparation of tārabīja (25–34); the preparation of sāraṇātaila (38–44); the preparation of krāmakasattva, used in krāmaṇa (45–52); the preparation of various types of biḍa and their use in jāraṇa (54–90).

Chapter eleven (svedanādyanuvāsanaṅtasaṃskāranavaka; 36 verses) enumerates eighteen saṃskāras of mercury: svedana, mardana, murchā, utthāpana, pātana, nirodhana, niyāma, dīpana, anuvāsana, jāraṇa, cāraṇa, garbha(druti), bāhyadruti, rañjana, sāraṇa, anusāraṇa, pratisāraṇa, and krāmaṇa (2–3). The first five saṃskāras, followed by dīpana and anuvāsana, are described in this chapter.

Chapter twelve (gandhakābhrāhemarajatajāraṇa; 85 verses) is concerned with the jāraṇa of sulphur (2–9) and with pakvabīja (10–16), the mukha- and khoṭabandha of mercury (17–22), methods which give a mukha to mercury (25–31), a ritual, accompanied by a mantra, that should precede cāraṇa (32–37), the cāraṇa of abhraka (38–57), the vedha of mercury that has been subjected to cāraṇa (38–70), the nirmukhacāraṇa and -jāraṇa of abhraka (71–74) and the results of these processes (75–84).

Chapter thirteen (abhrakādisattvapātanaḍyabhiṣekānta; 105 verses) describes the extraction of the essence of abhraka (5–21), māṃṣika (22–32), manāṣilā (33–41), haritāla (42–50), tuttha (51–55), sauvīra (56), rasaka (57–62), vaikrānta (63–70), gairika (71), saurāṣṭrī (72), sasyaka (73–74), kāsīsa (75–76), rājāvarta (77–78), and śroto'ñjana (79–80). The second part of the chapter is devoted to the making of mixtures of two substances (dvandvamelāpana; 81–98) and to two ways of preparing the fluid used for abhiṣeka (99–103).

Chapter fourteen (dvandvasattvādibījajāraṇahemajāraṇahematārakaraṇa; 107 verses) is about jāraṇa, the svarṇa- and tārabīja employed in this process, and the vedha resulting from it.²⁶

Chapter fifteen (jāraṇādigarbhadrāvaṇa; 128 verses) is about the following sub-

jects: the preparation of various bījas (2–16 and 95–101), the colouring of mercury (rañjana; 17–25 and 64–66), druti (38–50 and 58–60ab), jāraṇa (60cd–63, 79–84, 102–104), and vedha (26–37, 51–57, 67–78, 85–101, 105–127).

Chapter sixteen (bhūnāgasattvādisiddhiyogaiḥ svarṇakaraṇam; 121 verses) is devoted to the preparation of bhūnāgasattva (2–12) and bhūnāgataila (13–14), the preparation of guhyasūta (15–20),²⁷ its jāraṇa and use in making gold (21–41), the use of vaikrānta of a red, yellow, black, white, or copper colour in making gold and silver (42–89), the four varieties of capalā and their uses in making gold and silver (90–103), and some other methods to arrive at the transmutation of base metals (104–120).

Chapter seventeen (drutikaraṇa; 73 verses) describes the liquefaction (druti) of mica (abhraka; 2–30), abhrakasattva (31–39), gold and silver (40–42), tīkṣṇaloḥa (43–44 and 53–54), all the metals (45–46 and 56–59), gold (47–52), kāntaloḥa (55), māṃṣikasattva (60), all the gems and metals (61–65), diamonds (66–68), vaikrānta, and all the gems (69–71). The chapter ends with two verses on the stabilization (sthāpana) of a druti (72–73).

Chapter eighteen (drutivajraratnajāraṇākrameṇa pāṣāṇavedhaparyantavedhavi-dhiḥ; 183 verses) deals with several ways of mixing a druti with mercury (drutime-lāpana; 2–12)²⁸ and the uses of these mixtures in making gold (57–58, 85–98) and silver (79–84), the preparation of vajrabīja (99–106) and its jāraṇa, which results in several types of vedha (107–149), and the preparation of another bīja which, after processing it, enables mercury to pervade all kinds of materials, even rocks and stones (giri, pāṣāṇa), changing them into gold (150–182).

Chapter nineteen (ratnādigandhavādanadhaṇavardhana; 140 verses) describes how to make paste gems: padmarāga, indranīla, marakata, gomeḍa, puṣparāga, nīlamāṇikya (2–16), pearls (17–32),²⁹ and coral (33–40). Also described are the preparation of artificial cinnabar (41–45) and sindūra (46–54), the preparation of saindhava and suvarcala (55–59), the adulteration of hiṅgu (60–69), the making of artificial tin (70–74) and amlavetasa (75–78), the preparation of ink (maṣī; 79–80),³⁰ the adulteration of ghee (81–88), the preparation of fake sandal, camphor (karpūra), musk (kastūri) and saffron (kuṅkuma) (89–119),³¹ the preparation of divyadhūpa (120–127), the extraction of fragrant substances from flowers (puṣpadruti; 128–131), and magical methods to increase the yield of the grain on the fields (dhānyavardhana; 132–139).

Chapter twenty (no title; 143 verses) gives an account of the bandha of mercury (2–49), the preparation of a mercurial bhasman (50–57), giving a mukha to baddha mercury (58–62), several methods of transmuting base metals into gold or silver (63–104), giving a mukha to lead (105–109), ways to soften (mṛdūkaraṇa) hard metals (110–114), the preparation of guhyasūta and its use (116–121), the preparation of guhyavaṇa and guhyānāga (122–129), three varieties of kāmādhenuṭikā (130–137), some methods of changing silver, lead and sitasvarṇa into gold (138–141), and, finally, a method of making mercury able to digest mica (abhrakagrāsa; 142).

The Rasāyanakhaṇḍa

The Rasāyanakhaṇḍa³² (951 verses) is, as indicated by its title, especially devoted to rasāyana and allied subjects.

Chapter one (rasamāraṇa; 57 verses) introduces rasāyana and related topics (1–24); eleven methods of killing mercury are dealt with (25–55). The garbhayantra, employed in some of these methods, is also described (38cd–40).

Chapter two (divyarasadehasādhana; 140 verses) is concerned with the formulae of a number of rasayogas and their effects. Many of these rasas may not be found in earlier texts.³³

Chapter three (guṭikārasāyana; 221 verses) describes a series of miraculous pills (guṭikās and vaṭikās) to be employed in the saṃskāras called krāmaṇa and vedha, as well as for rasāyana purposes. Some of these pills may be peculiar to the Rasāyanakhaṇḍa,³⁴ while some are also found in the *Rasakāmadhenu*, which may have borrowed them.

Chapter four (nānārasāyana; 115 verses) is concerned with various rasāyanas (1–43). This chapter also contains a number of kalpas: brahmavṛkṣa- (44–59), śvetapalāśa- (60–63), muṇḍī- (64–66), devadālī- (67–72), śvetārka- (73–75), hastikarṇa- (76–79), rudantī- (80–84ab), and nirguṇḍīkalpa (84cd–91).³⁵ This kalpa section is followed by rasāyana formulae (92–100), a śunakaśālmalikālpā (101–107ab), rasāyana formulae again (107cd–111), and verses on the addition of pāradaśman to the preparations described, the mantra to be recited when using them, and rules concerning their employment (112–115).

Chapter five (udvartanakeśarāñjana; 71 verses) contains formulae that remove wrinkles and turn grey hair black again (2–62ab); it ends with some recipes which whiten the hair (62cd–70).

Chapter six (vīryavardhana; 89 verses) consists of vājīkaraṇa formulae, in particular in the form of rasayogas (2–64ab).³⁶ The second part of the chapter is about vājīkaraṇa recipes in which the main ingredients do not consist of mercury or substances derived from it.

Chapter seven (vīryastambhanalingavardhana; 73 verses) contains prescriptions which delay or suppress ejaculation and make the male member large, long and firm.

Chapter eight (śrīparvatasādhana; 185 verses) is about dehasiddhi and lohasiddhi; it describes how to acquire a divine body and turn base metals into gold. This interesting chapter mentions repeatedly the mountain called Śrīśaila and abounds from beginning to end in names of local deities and geographical names.

The Mantrakhaṇḍa

The *Mantrakhaṇḍa*³⁷ is arranged in seven subdivided chapters:³⁸ (1) sarvavaśyā-dipatīvaśya:³⁹ (a) sarvavaśya (subjugating all creatures), (b) rājavaśya (subjugating the king),⁴⁰ (c) strīvaśya (subjugating women),⁴¹ (d) līngalepana (anointing the penis), (e) strīdrāvaṇa (luring women), (f) patīvaśya (subjugating one's husband); (2) ākarṣaṇādistambhana: (a) ākarṣaṇa (attraction),⁴² (b) stambhana (immobilization),⁴³ (c) agnistambha (immobilizing fire), (d) jalastambhana (immobilizing water); (3) mohanādigṛhṇakleśanivāraṇa (averting the creation of confusion and domestic troubles): (a) mohana (delusion),⁴⁴ (b) uccāṭana (extirpation or eradication),⁴⁵ (c) māraṇa (killing),⁴⁶ (d) vidveṣaṇa (causing dissension),⁴⁷ (e) vyādhikaraṇa (causing illness),⁴⁸ (f) unmattākaraṇa (causing mental derangement), (g) ṣaṇḍhākaraṇa (causing im-

tence), (h) bhagabandhana (sealing the vagina), (i) gṛhṇakleśanivāraṇa (averting evils from the house); (4) kautūhalāni (conjuring tricks); (5) yakṣiṇisādhana (conjuring up a yakṣiṇī); (6) añjanādiṇḍukāsādhana: (a) añjana (ointments), (b) adṛśya (invisibility), (c) pādūkāsādhana (acquiring magic sandals); (7) mṛtasamjīvanādikakṣapuṭī: (a) mṛtasamjīvana (resuscitation),⁴⁹ (b) nirāhāra (fasting), (c) sāṅgopāṅgaprakāreṇa kakṣapuṭī (the *Kakṣapuṭī* in all its main and subsidiary parts).⁵⁰

This table of contents shows that the *Mantrakhaṇḍa* is chiefly concerned with saṅkarman, the 'Six Acts' of Indian magic.⁵¹ It is closely related to Nāgārjuna's *Kakṣapuṭa* and reproduces some of its verses and mantras. The subjects dealt with in both works are similar.⁵²

Some MSS of the *Mantrakhaṇḍa* may even contain the text of the *Kakṣapuṭa*, such as Cat. Madras Nr. 13202, which contains a text in twenty chapters (paṭala) with the following headings: (1) mantrasādhana, (2) sarvalokavaśīkaraṇa, (3) rājavaśya, (4) strīvaśya, (5) patīvaśya, (6) ākarṣaṇa, (7) agnījalastambhana, (8) aśanistambhana,⁵³ (9) mohanocāṭana, (10) māraṇavidhi, (11) vidveṣaṇādi, (12) mantrīkaraṇa,⁵⁴ (13) kautukavidhāna, (14) yakṣiṇīmantrasādhana, (15) sarvāñjanasādhana, (16) nidhigrahaṇa, (17) adṛśyakaraṇa, (18) pādūkāsādhana, (19) mṛtasamjīvinī, and (20) sāṅgopāṅgakacchapaṭaprakaraṇa.⁵⁵

One version of the *Kakṣapuṭa*⁵⁶ states in one of its introductory verses that the *Mantrakhaṇḍa* will be expounded; the arrangement of its contents is close to that of the Wellcome MSS of the *Mantrakhaṇḍa*.

The introductory verses of some texts of the *Mantrakhaṇḍa* refer to the same earlier works, in particular Tantras, as the opening verses of the *Kakṣapuṭa*.⁵⁷

Authorities and works quoted or mentioned in the *Rasaratnākara* and the glosses on the *Rasendrakhāṇḍa* are:⁵⁸ Agastya (II: viśphoṭa 16–17), the Aśvins (II: raktapitta 52–59; śūla 33–40; kuṣṭha 264–268; amlapitta 68–79; pradara 12–17; yonivyādhi 9–16), Ātreya (II: vṛaṇāśoṭha 17–25; kuṣṭha 110–117; pradara 23–29ab), Bhārgava (II: kuṣṭha 98–109), Bindusāra (II: raktapitta 34–35), Cakra⁵⁹ (II: vātavyādhi 161–164), Candranātha (II: śūla 77–85; kuṣṭha 217–226), Caraka (jvara 1–26 and 242–248; visarpa 17), Carpaṭisiddha (I.1.17),⁶⁰ Devadeva (II: śūla 24–32), Dhanvantari (II: parīṇāmaśūla 11–17), *Dīpikā* (I.1.16 and 27–30; 4.48–54),⁶¹ Gahanānanda (II: vātarakta 50–57 and 102–109; kuṣṭha 217–226), Gahananātha (II: udara 90–93; ślīpada 56–65 and 66–70; kuṣṭha 230–231 and 232–235), Gorakṣanātha (IV.4.100), *granthāntara* (I.10.48–50; II: jvara 121–123, 282–285, 406–411; grahaṇī 45–53, 91–95, 109–116; pāṇḍuroga 79–82), *Haramekhalā* (II: pāṇḍuroga 83–85), *Haramekhalakagrantha* (introductory verses V),⁶² Hārītamuni (II: vātavyādhi 60–87; ślīpada 33–41), Jatūkaraṇa (II: gloss ad unmāda 22–25),⁶³ *Kākacāṇḍeśvarīmata* (introductory verses V),⁶⁴ Kāṅkāyana (II: gulma 12–18), Kāśyapa (II: cakṣūroga 58–63), Kesarin (II: vātarakta 91–95; āmavāta 50–60), *Kriyākālaguṇottara* (introductory verses V),⁶⁵ Kṛṣṇātreya (II: vātarakta 40–49), Mahādeva (II: vājīkaraṇa 93–101), Manthānabhairava (IV.3.197), Nāgārjuna (I.1.17; II: amlapitta 49–67; cakṣūroga 36–40; III.5.52), Nārada (II: arśas 75; yonivyādhi 38–45), Niścalakara (II: glosses ad pāṇḍuroga 29–36 and 41–43; sthāulya 27), *paragrantha* (II: ūrustambha 72–77), Punarvasu (II: bradhnayāddhi 19),

Rasahrdaya (II: gandhakaśuddhi at the end of raktapitta), *Rasamaṅgala* (I.1.16),⁶⁶ *Rasaratnākara* (II: jvara 124–139 and 286–290; grahaṇī 54–61; mandāgni 53–55; gloss ad kāsa 82–87),⁶⁷ *Rasārṇava* (II: ūrustambha 61–69; introductory verses V),⁶⁸ *Rasendracūḍāmaṇi* (I.10.51–61),⁶⁹ *Śabdārṇava* (II: gloss ad vātavayādhī 161–164), *Śaivasiddhānta* (II: vājīkaraṇa 179–186), *Śambhu* (I.1.16; II: viṣa 19–28; III.16.54 and 18.48), *Śaṃkara* (II: arśas 75–112; III.12.70), *Siddhamata* (I.9.47–53),⁷⁰ *Śiva* (III.18.183; IV.1.21ab), *Suśruta* (I.1.18; II: gloss ad vidradhi 20), *Tārā* (II: pariṇāma-śūla 28–33), *Trivikrama* (II: gloss ad pāṇḍuroga 41–43), *Trivikramadeva* (gloss ad pāṇḍuroga 29–36), *Uddiṣatantra* (introductory verses V),⁷¹ *Vāgbhaṭa* (I.1.18; II: jvara 105),⁷² *Vāgbhaṭa* (I, prose between 10.69ab and cd), *Vaidyanātha* (II: grahaṇī 27–33), *Vaidyasāgara* (I.1.18), *Vāsudeva* (II: vājīkaraṇa 48–60), *Viṣṇu* (II: pradara 35–41; rasāyana 32–40), *Viśvāmītra* (II: kṣudraroga 39–45), *Yogamuktāvalī* (I.1.25–26 and 2.2),⁷³ *Yogaratanākara* (II: gandhakaśuddhi at the end of raktapitta; āmavāta 50–60), and *Yogaratanākaraśamuccaya* (II: gandhakaśuddhi at the end of raktapitta).

Works quoting from or referring to the *Rasaratnākara*⁷⁴ are: Ānandabhāratī's *Ānandamālā*,⁷⁵ the pariśiṣṭas of the *Ānandakanda*, the *Āyurvedīya Khanijavijñāna*, Basava's *Śivatattvaratnākara*, Bhāvamīśra's *Bhāvaprakāśa*, *Bheṣajasamhitā*, *Bṛhannighaṭuratnākara*, Caturbhūja's commentary on the *Rasahrdaya*, Gulrājśarmamīśra's commentary on the *Āyurvedaprakāśa*, Haridattaśāstrin's commentary on the *Rasatarāṅgiṇī*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Herambasena's *Gūḍhabodhakasamgraha*,⁷⁶ Jñārasarāma's version of the *Amṛtasāgara*, Khare's commentary on the *Rasaratnasamuccaya*, Kūpīpakvarasanirmānavijñāna, Mahādeva's commentary on the *Rasapaddhati*, Mallinātha's commentary on the *Amarakoṣa*, Meghamuni's *Meghavinoda*, Nilakaṇṭha's *Basavarājīya*, *Pāradasamhitā*, Rāmacandra's *Rāmavinoda*, *Rasadhātuprakāśa*, *Rasakakṣāpuṭa*, *Rasakāmadhenu*, *Rasaratnasamuccaya*, *Rasārṇavakalpa*,⁷⁷ *Rasasindhu*,⁷⁸ *Rasatattvavivecana*, *Rasavidyāmahārṇava*, *Rasāyanasamgraha*, *Rasayogasāgara*, *Rasendrakalpadrūma*, *Rasendrasambhava*, *Rasoddhāratana*, the bhasmapīṣṭiprakaraṇa of the *Rasoddhāratana*, Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, Devendranātha and Upendranātha Senagupta's *Āyurvedasamgraha*, Somadevaśarman's commentaries on the *Āyurvedaprakāśa*, Tōḍara's *Āyurvedasaukhyā*, Trimalla's *Bṛhadyogatarāṅgiṇī*, *Vaidyakasamgraha*, Vinodalāla Sena's *Āyurvedavijñāna*, and *Yogaratanākara*.

Verses from the *Rasaratnākara* form part of the *Ānandakanda* and *Rasajalanidhi*.

The *Rasaratnākara* was one of the sources of the *Ma'din al-Šifā'*.⁷⁹

A *Ratnākara* that may or may not be Nityanātha's *Rasaratnākara* is quoted or referred to in Tōḍara's *Āyurvedasaukhyā*,⁸⁰ the *Rasendrakalpadrūma*, the *Sāligrāmanighaṇṭu*, and *Vaidyacintāmaṇi's Prayogāmṛta*.

Nityanātha is quoted or mentioned in Ānandabhāratī's *Ānandamālā*, the *Bheṣajasamhitā*, Caturbhūja's commentary on the *Rasahrdaya*,⁸¹ Dattarāma's *Rasārājasundara*,⁸² Dattātreyā's *Rasacāṇḍāmsu*,⁸³ Deveśvara's *Rasendraratnakoṣa*,⁸⁴ Govindarāma's *Rasasamgrahasiddhānta*,⁸⁵ Haridattaśāstrin's commentary on the *Rasatarāṅgiṇī*, the *Hathayogapradīpikā*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Herambasena's *Gūḍhabodhakasamgraha*, the *Kāmaratna*, Khare's commentary

on the *Rasaratnasamuccaya*, the *Lakṣmaṇotsava*, Mādhava's *Āyurvedaprakāśa*, the *Nṛsimhanidāna*, the *Pāradasamhitā*, Raghunātha's *Sārasamgraha*, Rāmakṛṣṇa's *Rasārājāśaṃkara*,⁸⁶ Rāmanātha's *Yogamahārṇava*,⁸⁷ Rāmasena's *Rasasārāmṛta*, the *Rasaratnadīpikā*, *Rasaratnasamuccaya*, *Rasendracintāmaṇi*, *Rasendrakalpadrūma*,⁸⁸ *Rasendrasārasamgraha*, Śālagrāma's *Dhanvantari*,⁸⁹ Śālinātha's *Rasamañjarī*,⁹⁰ Tōḍara's *Āyurvedasaukhyā*, and Trimalla's *Bṛhadyogatarāṅgiṇī*.⁹¹

The *Rasaratnākarakṛt* is quoted in the *Āyurvedaprakāśa*.

Nityanāthasiddha is mentioned in Brahmanānda Bhāratī's *Puruṣārthaprabodha*,⁹² Raghunātha's *Sārasamgraha*, and Śrīnivāsa's *Haṭharatnāvalī*.⁹³ A work called *Nityanāthīya* is quoted in the *Basavarājīya*.

Special features

The *Rasakhaṇḍa*

Eight doṣas of mercury are distinguished: nāga, vaṅga, mala, vahni, cāncalya, viṣa, giri, and asahyāgni (1.27–29ab), although seven kañcukas are also referred to (2.9).

Chapter two enumerates the plants, plant products and some other substances employed in the killing of mercury (māraṇauśadhi): amṛtā, ardhacandrikā, arka, balā, bhṛṅgarāj, bhūkadamba, brahmadandī, cakramarda, caṇḍālīnī, citraka, devadālikā, gokṣura, hastiśuṇḍī, jāṭī, jayantī, kākamācī, kākatuṇḍikā, kanda, kanyā, kaṭutumbī, koṣṭakī, kuraṇṭaka, lajjālī, lākṣā, lāṅgālī, meghanāḍā, nīrakana, paṭu, raktāgrānirguṇḍī, ravipriyā, sahaddevikā, śarapunkhikā, sarpākṣī, snuh, suṇṭhī, ṭṛṇamustikā, vajravallī, vārāhī, vāṣṭā, viṣamuṣṭī, and viṣṇukrāntā (2.15–20).

Chapter three contains a list of the niyāmaka plants and substances: aḥskara, ākhuparnikā, bhṛṅgarāj, brahmadandī, ciñcikā, citraka, dhattūra, grīṣmasundara, guḍūcī, haṃsapadī, haridrā, harītakī, hastiśuṇḍī, hiṅgu, indravāruṇī, kākajāṅghā, kākamācī, kañcukī, kokila, kṣīrīṇī, kuñcī, kuraṇṭaka, mahārāṣṭrī, mākṣika, maṇḍūkaparnī, matsyākṣī, mayāṅkā, mṛgadūrvā, muṇḍī, mūrvā, mūṣālī, padmaka, pāṭalī, pota, punkhā, raktacitraka, saindhava, sāmbhara, śarapunkhikā, sarpākṣī, śatāvartī, śīgru, śikhiśikhā, somavallī, śūraṇa, svayambhūkusuma, śvetārka, śvetavarṣābhū, tagara, tilakarṇikā, triparṇikā, utpala, vajrakandā, vajralatā, vandhyā, varṣābhū, viṣṇukrāntā, vranaghnī, vṛścikālī, vyāghrapādī, and yakṣalocana (3.34–41).

Chapter ten mentions eight poisonous plants that may be used by a physician: kūrma, mustaka, saktuka, sarṣapāhvaya, śṛṅgī, śvetaśṛṅgī, vālaka, and vatsanābha; ten poisonous substances are to be avoided: dardura, granthī, hālāhala, hāridra, kālākūṭa, karkaṭa, keśava, markāṭa, meśaśṛṅgī, and raktaśṛṅgika. (10.38–40). The sālasārādigaṇa, employed in bhāvanā, consists of aguru, arjuna, asana, the two types of candana, dhava, gardabhāṇḍa, kāliya, the two types of karañja, karkaṭa, khadira, the two types of lodhra, pūga, pūtika, the two types of sāla, and śīrīṣa (10.69–71).

Some noteworthy names of plants occurring in the *Rasakhaṇḍa* are: kākamañjarī (3.26), kāntamukha (5.37), kova (5.28), and nāgavandhyā (5.39).

The *Rasendrakhaṇḍa*

The arrangement of the diseases in the *Rasendrakhaṇḍa* largely agrees with the *Mā-*

dhavanidāna, apart from the addition of *jvarātisāra*, *jaratpittaśūla*, *urograha*, *bradhna*, *snāyuka*, *somaroga*, and *rasājirṇa* to the list of Mādhava's diseases; separate chapters on *pānātaya*, *yonikanda*⁹⁴ and *mūdhagarbha* are absent. The chapter on *urograha* is identical with the chapter on this disease in Vaṅgasena's *Cikitsāsārasaṃgraha*; the verses on *somaroga* are partly the same as those in Vaṅgasena's work. The chapter on women's diseases has verses on the prognostic significance of the day of the week on which a woman begins to menstruate (38–45)⁹⁵ and on the development of the embryo (80–85); it contains specific recipes against *śūla* in each of the ten months of pregnancy (99–116) and verses on eight malpositions (126–127). The chapter on children's diseases mentions disorders called *cora* (16–19) and *paścādruja* (48). The chapter on poisoning enumerates twenty-five poisons of vegetable origin (19–28).

Some noteworthy names of plants mentioned in the *Rasendrakhaṇḍa* and its glosses are: *ābhā* (*bhagna* 7), *āhā* (*vātavyādhi* 39), *balāhaka* (*jvara* 180; gloss: = *mustaka*), *cāraṭī* (*unmāda* 22; gloss: = *kumbhāḍu*), *celaka* (*vātavyādhi* 135; gloss: = *guvākatvac*), *coraka* (*unmāda* 22; gloss: = *corahelī*),⁹⁶ *dahanaviṭapī* (*nāsāroga* 85; gloss: = *lāngalī*), *gauraharidrā* (*śārīravraṇa* 11; gloss: = *dāruharidrā*), *kuṭhāraka* (*śārīravraṇa* 20), *lāngalīdvaya* (*unmāda* 23; gloss: = *rāsnā* and *gandharāsnā*), *malapū* (*bhagandara* 2; gloss: = *kṛṣṇodumbara*), *pāṣāṇa* (*aśmarī* 4; gloss: = *kulattha*), and *suranḡī* (*karnāroga* 3; gloss: = *rakṣasobhāñjana*).

The Vādikhaṇḍa

The *Vādikhaṇḍa* enumerates six substances called *śakti*: *vajra*, *vaikrānta*, *vajrābhra*, *kāntapāṣāṇa*, *taṅkaṇa*, and *bhūnāga* (1.56). The *uparasas* consist of: *gandha*, *tālaka*, *kāśisa*, (*manah*)*śilā*, *kaṅkuṣṭha*, *bhūkhaga*, *rājāvarta*, and *gairika* (1.57).⁹⁷ The *mahārasas* are *rasaka*, *vimalā*, *tāpya*, *capalā*, *tuttha*, *añjana*, *hiṅgula*, and *sasyaka* (1.58–59ab).⁹⁸

The names of the twenty-seven *Rasasiddhas* are: *Bali*, *Bāṇāsura*, *Candrasena*, *Carpaṭi*, *Govinda*,⁹⁹ *Hara*, *Indradyumna*,¹⁰⁰ *Kāmalin*,¹⁰¹ *Kāpālika*, *Kapila*, *Khaṇḍa*, *Lampaṭa*, *Loka*,¹⁰² *Māṇḍavya*, *Nāgabuddhi*, *Nāgārjuna*, *Naravāhana*, *Ratnaghoṣa*, *Śambhu*, *Śārada*, *Subuddhi*, *Surānanda*, *Śūrāsenaka*,¹⁰³ *Tāttvika*,¹⁰⁴ *Vāḍava*,¹⁰⁵ *Vyālācārya*, and *Yaśodhara* (1.66–70).¹⁰⁶

The group of divine drugs (*divyausadhi*) is composed of *agnidamanī*, *ajakarṇī*, *ajāmārī*, *ākhukarṇī*, *ānkola*, *apāmārga*, *arka*, *badarī*, *bākucī*, *balā*, *bhūkadamba*, *bhūmipātālī*, *bilva*, *brahmadanḍī*, *brāhmī*, *br̥haṭī*, *cakramarda*, *caṇā*, *cāṇḍālī*, *candralatā*, *cāṇgerī*, the three kinds of *citraka*, *devadālī*, *ekavīraka*, *eraṇḍa*, *garuḍī*, *ghanā*, *gojīhvā*, *gorambhā*, *guñjā*, *haṃsapādī*, *hastimūlikā*,¹⁰⁷ *hemavallī*, *hiṅgu*, *indravāruṇī*, *jalakumbhī*, *jāṭī*, *jayā*, *kadalī*, *kākajaṅghā*, *kākamācī*, *kākatuṇḍikā*, *kālikā*, *kāñcānana*, *kaṅguṇī*, *kanyā*, *kāravallī*, *karavīra*, *kārpāsa*, *kaṭutumbī*, *khaṇḍajātī*, *kokilākṣaka*, *kośātakī*, *kṛṣṇadhattūra*, *kṛṣṇajīrā*, *kṛṣṇatulasī*, *kṣīrakandaka*, *kukkuṭī*, *kumbhī*, *lajjarī*, *lākṣā*, *lakṣmaṇā*, *lāngalī*, *mahābalā*, *mahārāṣṭrī*, *maṇḍūkapaṇṇikā*, *mañjiṣṭhā*, *markaṭī*, *maruvaka*, *meghanāda*, *meṣaśṛṅgī*, *minākṣī*, *muṇḍī*, *mūrvā*, *muśālī*, *nāgabalā*, *nāgavallikā*, *nīlī*, *niśā*, *padmacāriṇī*, *palāśa*, *pātālagaruḍī*, *pathyā*, *peṭarī*, *pīluka*, *pūḡī*,¹⁰⁸ *śvetā* and *raktā* *punarṇavā*, *pūṅkhā*, *puṣkaramūlaka*, *raktasnuhī*, *rambhā*, *rudantī*, *sahadevikā*, *saindhava*, *śākavṛkṣa*, *śamī*, *śaṅkhapuṣpī*, *saṣapa*, *sarpākṣī*, *śatāvārī*, *śikhiśikhā*, *sinduvārikā*, *snuhī*, *somalatā*, *śuṇṭhī*, *sūraṇa*, *sūryavartaka*, *svaṇapuṣpī*,

śvetāparājītā, *tilaparnī*, *triparnikā*, *udumbara*, *vacā*, *vajralatā*, *vāla*,¹⁰⁹ *vanarājaka*, *vanasūraṇa*, *vandhyākarkoṭakī*, *vartulapattrakā*, *vijayā*, *viṣamustī*, *viṣṇukrāntā*, *vṛścīkālī*, *vyāghranakṣī*, *yavaciñcī*, all the *kṣīravṛkṣas*, and the various kinds of poisonous substances (2.14cd–28).

The plants called *siddhamūlikā*, used in the *jāraṇa* of mica, are: *agni*, *agnimathanī*, *br̥haṭī*, *haṃsapādī*, *indravāruṇī*, *kadalī*, *khaṇḍajātī*, *kumārīkā*, *lāngalī*, *maṇḍūkī*, *mūṣā*, *śaṅkhapuṣpikā*, *sarpākṣī*, *vajrī*, *vandhyākarkoṭakī*, and *vyāghrapādī* (12.53–54).

A *cakrayantra* (6.75cd–76ab) and *gaurīyantra* (15.103; 16.115) are referred to. (*Anu*)*vāsana* is regarded as a distinct *samskāra* (11.35). Eight varieties are described of *mākṣikasattva*: resembling *guñjā* (seeds),¹¹⁰ *indragopa*, a gem (*maṇi*), *śukatuṇḍa* (the beak of a parakeet), *śulba* (copper), *kiṃśuka* flowers, and *lākṣā* (lac), and, finally, a variety called *dhautā* (washed) (13.22–36). Two varieties of *manaḥśilāsattva* are distinguished: resembling gold and the rays of the sun in the early morning (13.37–41). Four varieties of *capalā* are mentioned: red, yellow, white, and black (16.90).

Some interesting names of plants are: *bhūmyapāmārga* (12.45), *karuṇī* (6.70), *kuḍuḥujikā* (4.33), *mahindī* (9.67), *murunḍī* (11.15), *nāgakanyā* (10.17), *teṇṭū* (8.45), *vasantapuṣpikā* (8.22), *vasubhadra* (20.112), *vasubhaṭṭa* (20.92), and *vegī* (17.30).

The Rasāyanakhaṇḍa

The *Rasāyanakhaṇḍa* describes in its first chapter dietary and behavioural rules to be observed prior to and during the use of mercurial preparations for *rasāyana* purposes. One of the requirements consists of the removal of loṇa- and *amladoṣa*, caused by the consumption of salty (*lavaṇa*) and sour (*amla*) articles of food (1.4–6ab). Paying homage to the *Kumārīs*¹¹¹ and *Yoginīs*¹¹² is also recommended (1.8).

The ritual connected with the consumption of *kālāntarasa* prescribes sexual intercourse with a menstruating woman and the collection of the mixture of male and female procreatory fluids (*rajobīja*) that is called *gagana* (3.197cd–199ab).

The consumption of fishes that can live on wet soil (*vālūkāmatsya*, *vālūkāmīna*, *sthalamīna*)¹¹³ is repeatedly recommended for their aphrodisiac properties (6.80; 7.38). They are found on the shore of the Western ocean, near the *Amaracaṇḍeśvara* temple (prose between 7.38 and 39). Pills in the form of leeches (*jalaukā*) are employed in order to suppress ejaculation during intercourse (7.39–55).

Geographical names and names of deities connected with particular localities, mentioned in chapter eight, are: *Acaleśa* (154: a mountain), *Acchatailā* (133: a mountain), *Alampura* (63, 64: a town),¹¹⁴ *Amareśvaradeva* (155),¹¹⁵ *Āvartadeva* (36), *Bhīmapāduka* (63: a village), *Bhṛgupātana* (129, 132), *Brahmeśvareśvara* (56), *Caṇḍikā* (58, 168), *Candraguptapṛākāra* (135), *Chelikā* (122), *Gaṇeśvara* (108), *Ghaṇṭāsiddheśvara* (5, 9), *Guṇḍiprabhā* (144: probably a mountain), *Guṭikāsiddhakeśvara* (182), *Hastīśilā* (41),¹¹⁶ *Hastīśiras* (42), *Ileśvara* (153),¹¹⁷ *Īśvara* (71), *Jāleśvara* (33),¹¹⁸ *Kadambeśvaradeva* (116), *Kākalerī* (176: a forest), *Kālavarneśvara* (148), *Kokilābīla* (24), *Koṭīśvara* (153),¹¹⁹ *Kuṇḍaleśvara* (38, 120),¹²⁰ *Līṅgaparvata* (166: a mountain),¹²¹ *Mahānandeśvara* (147), *Maheśa* (67), *Mallikārjuna* (2, 129, 135, 173),¹²² *Mallinātha* (5, 10),¹²³ *Maṇipallī* (20: a village), *Maukalī* (89: a *Yakṣiṇī*), *Nandana* (87, 94, 96, 98, 99, 100: a forest),¹²⁴ *Nīlavana* (142: a forest), *Parameśvara* (85),

Paṭāhakarṇa (159), Piṇḍādevī (169), Puruṣeśvara (39), Puṣpagiri (121: a mountain),¹²⁵ Rāmeśvara (35),¹²⁶ Śaila (182),¹²⁷ Śailarāja (159),¹²⁸ Śambhu (1, 185), Sarveśvara (173), Śiva (43), Śrigiri (185),¹²⁹ Śrīśaila (8, 14, 33, 56, 67, 140, 144, 147, 149, 158, 184),¹³⁰ Sureśvara (33), Svargapurī (29), Tambūpura (146),¹³¹ Tripurāntakadeva (14, 19, 24, 29, 31),¹³² Turaleśvara (149), Umāparvata (150: a mountain), and Yogeśvarī (64).

The Rasāyanakhaṇḍa contains a rather large number of mantras.¹³³

Some noteworthy names of plants are: Īśvaraliṅgī (7.23), munimuṇḍikā (5.2), riṭṭhaka (8.40), and vajrakāpālīnī (5.5). An interesting substance is sābuṇa (5.29).¹³⁴

The author

The author mentions his name as Nityanātha (I.1.25). The colophons of the MSS and editions call him Nityanātha or Nityanāthasiddha,¹³⁵ son of Pārvaṭī.¹³⁶ More information is not available.¹³⁷

The author refers to his teacher (I.1.22; III.19.140; 20.62) without disclosing his name.

Nityanātha is regarded as one of the Rasasiddhas.¹³⁸

Works ascribed to Nityanātha, apart from the *Rasaratnākara*, are: (1) *Indrajālakautuka*;¹³⁹ (2) *Kakṣapuṭa*;¹⁴⁰ (3) *Kakṣapuṭīvidyā*;¹⁴¹ (4) *Kāmaratna*;¹⁴² (5) *Kāmaratnatantra*;¹⁴³ (6) *Kautūhalavidyā*;¹⁴⁴ (7) *Mantrasāra*;¹⁴⁵ (8) *Nityanāthatantra*;¹⁴⁶ (9) *Nityanāthīya*;¹⁴⁷ (10) *Rasaratnamālā*;¹⁴⁸ (11) *Rasaratnasamuccaya*;¹⁴⁹ (12) *Śabaracintāmaṇi*;¹⁵⁰ (13) *Siddhasiddhāntapaddhati*;¹⁵¹ (14) *Siddhisāvara*;¹⁵² (15) *Tantrakōṣa*;¹⁵³ (16) *Vandhyāvalī*;¹⁵⁴ (17) *Yogasāra*.¹⁵⁵ G. Hāldār¹⁵⁶ associates Nityanātha with the *Aśvinikūmarasamhitā*.

Some formulae ascribed to Nityanātha are: gulmavajriṇīvaṣī¹⁵⁷ and kāmēśvaramodaka.¹⁵⁸

An authority called Siddhanātha may be the same as Nityanātha. The *Kāmaratna* and *Yogasāra* are sometimes ascribed to him. Siddhanātha is quoted in the *Aṣṭamahāmātrā*. He is credited with some formulae: divyarasāyana,¹⁵⁹ lokanāyakarasa¹⁶⁰ and udayabhāskararasa.¹⁶¹

Date

Nityanātha's *Rasaratnākara* has been assigned to the period between the third century B.C. and the fourth century after Christ,¹⁶² the twelfth,¹⁶³ twelfth or thirteenth,¹⁶⁴ thirteenth,¹⁶⁵ thirteenth or fourteenth,¹⁶⁶ fourteenth,¹⁶⁷ and fifteenth century.¹⁶⁸ D.G. White expressed his opinion that Nityanātha lived slightly later than Gorakṣanātha but earlier than the author of the *Bhūtiprakaraṇa* of the *Gorakṣasamhitā*, in the late thirteenth century.¹⁶⁹

This uncertainty concerning the chronological position of the work can be cleared up by taking into consideration the works and authors mentioned in it and those referring to it. The reference to Gorakṣanātha indicates that the *Rasaratnākara* is later than the thirteenth century, the reference to the *Kākaṇḍeśvarīmata* that it is posterior to

about A.D. 1400. Nityanātha's work was well known in the sixteenth century, as appears from references to and quotations from it in Ānandabhāratī's *Ānandamālā*, Bhāvamīśra's *Bhāvaprakāśa*, Tōḍara's *Āyurvedasaukhyā*, and Miyaṇ Bhūwah's *Ma'din al-Ṣhifā'*. Nityanātha's date can be pushed back further because he was known to Gopālakṣṇa, the author of the *Rasendrasārasaṃgraha* (last quarter fifteenth century) and to the author(s) of the *Lakṣmaṇotsava* (A.D. 1449/50).

The evidence points to the first half of the fifteenth century as the period of composition of Nityanātha's *Rasaratnākara*. This dating is supported by the earliest MS of the work, completed in A.D. 1473.¹⁷⁰

Chapter 9

Rasaratnasamuccaya

The *Rasaratnasamuccaya* by Vāgbhaṭa¹ is an extensive manual of alchemy and iatrochemistry.

Contents²

The work consists of about 3,870 verses, arranged in thirty chapters (adhyāya); it can be divided into two parts: chapters one to eleven, dealing with alchemy, and chapters twelve to thirty, devoted to the treatment of diseases (iatrochemistry).

Chapter one (rasotpatti; 88 verses) begins with a maṅgala addressed to Śiva as the foremost physician of the world (jagatpradhānabhiṣaj) (1). It proceeds with an enumeration of the twenty-seven Rasasiddhas and a series of authors on rasaśāstra, whose works were studied by the compiler of the *Rasaratnasamuccaya* (2–8). These verses are followed by a description of the Himālaya and the abode of Śiva (10–21). The remaining subjects of the chapter are: the praise of mercury (22–41),³ its ability to bestow jīvanmukti (42–59),⁴ its origin (60–66),⁵ its names and varieties (67–79), the five gatis of mercury and their removal (80–87), and the origin of cinnabar (88).⁶

The subjects of chapters two to ten are: the mahārasas (2; 163 verses),⁷ uparāsas (3; 158 verses),⁸ ratnas (4; 84 verses),⁹ lohas (5; 243 verses),¹⁰ the initiation of a pupil (6; śiṣyopanayana; 64 verses),¹¹ the laboratory (7; rasaśālā; 37 verses),¹² technical terms (8; paribhāṣā; 101 verses),¹³ yantras (9; 87 verses),¹⁴ mūṣās, koṣṭhīs, puṭas and groups of substances (10; 97 verses).¹⁵

Chapters two to five, seven, eight and ten are for the greater part borrowed from the *Rasendracūḍāmaṇi*.

Chapter eleven (135 verses)¹⁶ describes two systems of weights (mānaparibhāṣā; 1–13), lists the eighteen saṃskāras (14–16), deals with the doṣas of mercury (20–25), and gives an account of a number of saṃskāras and related subjects (29–135). These saṃskāras and related subjects are: svedana (29), mardana (30–33), murchana (34–35), utthāpana (36), pātana (37–46), rodhana (48), niyāmana (49), dīpana (50–52), the rasamūlikā plants (53–59), bandha (60–107), strīdrāvaṇa (108–112), killing (māraṇa) of mercury (113–121), the uses of the ashes (bhasman) of mercury (122–127), two series of kakāras (128–130),¹⁷ and the treatment of disorders caused by mercurial preparations (132–135).

Chapters twelve to twenty-five deal with the aetiology, symptomatology and treatment, in particular by means of rasayogas, of a long series of diseases, arranged in a partly unprecedented way.¹⁸ Chapter twenty-six (59 verses) is devoted to rasāyana,

chapter twenty-seven (144 verses) to vājīkaraṇa.

Chapter twenty-eight (lohakalpa; 104 verses) describes thirty-six different lohakalpas, preceded by verses on the purification and killing of the metals (loha) used in these kalpas. Chapter twenty-nine (viṣakalpa; 160 verses), in the form of a dialogue between Śiva and Pārvatī, deals with the mythical origin of poison (1–9), thirteen poisonous substances of vegetable origin (10–19), the uses of poisonous substances (20–50), and one hundred and eighteen viṣakalpas (51–159). Chapter thirty (rasakalpa; 138 verses) is concerned with the jāraṇa (1–11) and killing (12–21) of mercury, the uses of its ashes (bhasman) in eighty-six rasakalpas (22–114), and the praise of the expert physician (115–137).

Sources are rarely referred to by the author.¹⁹ The *Rasārṇava* is mentioned at the end of the verses on weights of chapter eleven (11.13). The two series of kakāras of chapter eleven were taken from the *Devīśāstra* (11.128–129) and from a work by Śrīkrṣṇadeva (11.130). Some of the verses borrowed from the *Rasendracūḍāmaṇi* contain the name of its author, Somadeva;²⁰ verses with the names of authorities, referred to by Somadeva, are often left out.²¹ One method of killing diamonds is attributed to Somaśenānī (4.38–40). Rāmarāja's *Rasaratnapradīpa*²² and the *Rasaratnākara*²³ are quoted according to some of the editors of the *Rasaratnasamuccaya*.

Names of divinities and other authorities associated with particular formulae occur repeatedly in the chapters on treatment; noteworthy are the names of Ātreya,²⁴ Bhāluki,²⁵ Nāgārjuna,²⁶ Nityanātha,²⁷ and Suśruta.²⁸

In spite of the author's silence on the works he consulted and from which he borrowed, some of the sources can be identified.²⁹ The *Rasahrdaya* was used in the composition of chapter one.³⁰ Chapters two to five are mostly from chapters ten to twelve and fourteen of the *Rasendracūḍāmaṇi*.³¹ Chapter six has been taken from the Vādikhaṇḍa of the *Rasaratnākara*.³² Chapters seven and eight correspond to chapters three and four of the *Rasendracūḍāmaṇi*.³³ Chapter nine has a composite structure; it consists of borrowings from the *Rasārṇava*, *Rasendracūḍāmaṇi*, and some other, unidentified, texts.³⁴ Large parts of chapter ten are from chapters five and nine of the *Rasendracūḍāmaṇi*.³⁵ Some portions of chapter eleven derive from the *Rasārṇava* and *Rasaratnākara*.³⁶

A remarkable feature of the nidāna verses of chapters twelve to twenty-five is that they are not borrowed from the *Mādhavanidāna*, but from some so far unidentified source.

Works quoting from or referring to the *Rasaratnasamuccaya* by name are: Amikādattaśāstrin's commentary on the *Rasendrasārasaṃgraha*, the pariśiṣṭas of the Ānandakanda, the commentary on the *Aṣṭamahāmātrā*, the *Āyurvedīya Khanijavijñāna*, the *Bhāvaprakāśa*,³⁷ the *Bheṣajasaṃhitā*, the *Bṛhadrasarājasundara*, Devendra-nātha and Upendranātha Senagupta's *Āyurvedasaṃgraha*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa* and the same author's *Viśikhānupraveśavijñāna*, Haridattaśāstrin's commentary on the *Rasatarāṅgiṇī*, Lakṣmīrāma's commentary on the *Siddhabheṣajamaṇimālā*, Mādhava's *Āyurvedaprakāśa*, Mahādeva's commentary on the *Rasapaddhati*, Narendranāthamitra's *Capalanirṇaya* (in the *Rasatarāṅgiṇī*), the *Pāradasaṃhitā*, *Rasadhātuprakāśa*, *Rasakāmadhenu*, *Rasamitra*, *Rasatattvavivēcana*, *Rasavidyāmahārṇava*, *Rasayogasāgara*, *Rasendrakalpadruma*, *Rasoddhātatantra*, *Ra-*

tnākarausaḍhayaogagrantha, Śivadatta's auto-commentary on the *Śivakoṣa*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, the *Vaidyakasaṃgraha*, Yādevajī Trikamajī's *Rasāmṛta* and *Siddhayogasamgraha*, the *Yogarātnākara*, and Cat. Madras Nr. 13198.³⁸

The *Rasaratnasamuccaya* was one of the sources of *Āyurvedaprakāśa*, *Kūpī-pakvarasanirmānavijñāna*, *Rasavidyāmahārṇava*, and *Rasendrasambhava*.

The author of the *Rasaratnasamuccaya* is quoted as Rasavāgbhaṭa in the *Āyurvedā-bdhisāra*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Haridattasāstrin's commentary on the *Rasatarāṅgiṇī*, Mādhava's *Āyurvedaprakāśa*, Mahādeva's commentary on the *Rasapaddhati*, and the *Rasakāmadhenu*.³⁹ He is cited as Vāgbhaṭa in Mādhava's *Āyurvedaprakāśa*.

The *Rasaratnasamuccaya* is quoted anonymously in the *Rasajalanidhi* and *Rasendrapurāṇa*.

Special features

The names of the twenty-seven Rasasiddhas⁴⁰ mentioned in chapter one of the *Rasaratnasamuccaya* are:⁴¹ Ādima,⁴² Bhāskara,⁴³ Brahmā,⁴⁴ Candrasena,⁴⁵ Gomukha,⁴⁶ Govinda,⁴⁷ Hari,⁴⁸ Indrada,⁴⁹ Kambali,⁵⁰ Kāpālīka,⁵¹ Kāpālīn,⁵² Khaṇḍa,⁵³ Lampaka,⁵⁴ Laṅkeśa,⁵⁵ Māṇḍavya,⁵⁶ Matta,⁵⁷ Nāgabodhi,⁵⁸ Nāgārjuna,⁵⁹ Naravāhana,⁶⁰ Ratnakośa,⁶¹ Śambhu,⁶² Sāttvika,⁶³ Surānanda,⁶⁴ Śūrasenaka,⁶⁵ Viśārada,⁶⁶ Vyādi,⁶⁷ and Yaśodhana⁶⁸ (1.2–5ab).

The list is followed by the names of authors on rasaśāstra whose works were consulted by the son of Siṃhagupta, who wrote the *Rasaratnasamuccaya*. The authors mentioned⁶⁹ are: Bhairava,⁷⁰ Bhāluki,⁷¹ Hariśvara,⁷² Kākacaṇḍīśvara,⁷³ Mahādeva,⁷⁴ Maithilāhvaya or Maryalāhvaya,⁷⁵ Manthānabhairava,⁷⁶ Nandin,⁷⁷ Narendra,⁷⁸ Rasāṅkuśa,⁷⁹ Rasendratilaka,⁸⁰ Rṣiśrīṅga,⁸¹ Svachchandabhairava,⁸² Vāsudeva,⁸³ and Yogin⁸⁴ (1.5cd–8).

The second list of twenty-seven Rasasiddhas (6.51–55), borrowed from the *Rasaratnākara* (III.1.66cd–71ab),⁸⁵ consists of: Āgama,⁸⁶ Bali,⁸⁷ Bāṇāsura,⁸⁸ Candrasena,⁸⁹ Carpaṭi,⁹⁰ Govinda,⁹¹ Indradhūma,⁹² Kāmāri,⁹³ Kāpālīka,⁹⁴ Kapila,⁹⁵ Khaṇḍa,⁹⁶ Lampaka,⁹⁷ Laṅkā,⁹⁸ Māṇḍavya,⁹⁹ Muniśreṣṭha,¹⁰⁰ Nāgabuddhi,¹⁰¹ Nāgārjuna,¹⁰² Naravāhana,¹⁰³ Ratnaghoṣa,¹⁰⁴ Śambhu,¹⁰⁵ Śārada,¹⁰⁶ Subuddhi,¹⁰⁷ Surānanda,¹⁰⁸ Śūrasenaka,¹⁰⁹ Tāntrika,¹¹⁰ Vyālācārya,¹¹¹ and Yaśodhana.¹¹²

Five gatis of mercury are described: jalaga, haṃsaga, malaga, dhūmaga, and jīvagati; the first four are visible, whereas jīvagati is invisible (1.81–83). The eight mahā-rasas are: abhṛaka, vaikrānta, māṅṣika, vimala, adrija (= śilājatu), sasyaka, capala, and rasaka; rājāvarta, included in this group in the *Rasendracūḍamaṇi*, is omitted, while capala has been added (2.1); māṅṣika or tāpya is described as found along the river Tāpī and in the countries of the Cīnas, Kirātas and Yavanas (2.73). The eight uparasas consist of: gandhāśman (= gandhaka), gairika, kāsīsa, kākṣī, (harit)āla, (manah)śilā, añjana, and kaṅkuṣṭha (3.1); the eight sādhanārasas are: kampilla,¹¹³ gauripāṣāṇa, navasāraka, kaparda, vahnijāra, girisindūra, hiṅgula, and mṛddāraśrīṅga (3.126–127). Rājāvarta is regarded as one of the ratnas (4.75–81).

Chapter eleven discusses two systems of weights (11.1–13), the second of which is related to the Māgadha system of āyurveda.¹¹⁴

The eighteen saṃskāras enumerated are svedana, mardana, murchana, utthāpana, patana, rodha, niyāmana, saṃdīpana, gaganabhakṣaṇamāna, saṃcārāṇā, garbhadruti, bāhyadruti, jāraṇā, grāsa, sāraṇa, saṃkrāmaṇa, vedha, and śarīrayoga (11.14–16). The first eight saṃskāras, necessary for the preparation of medicinally useful substances, are described in more detail; the last ten saṃskāras, necessary for aurification, are neglected. Twelve doṣas of mercury are distinguished: three naisargikadoṣas: viṣa, vahnī, mala; two yaugikadoṣas: nāga and vaṇga; seven aupādhikadoṣas or kaṇcukas: parpaṭi, pāṭaṇi, bhedī, drāvī, malakarī, andhakārī, and dhvāṅkṣī (11.20–24).

Twenty-five types of bandha of mercury are distinguished; a twenty-sixth type, called jalūkābandha, recognized by some authorities, is added (11.60–64). The twenty-five types are: ¹¹⁵ haṭha-, ¹¹⁶ āroṭa-, ¹¹⁷ ābhāsa-, ¹¹⁸ kriyāhīna-, ¹¹⁹ piṣṭikā-, ¹²⁰ kṣāra-, ¹²¹ khoṭa-, ¹²² poṭa- or parpaṭi-, ¹²³ kalka-, ¹²⁴ kajjali-, ¹²⁵ sajīva-, ¹²⁶ nirjīva-, ¹²⁷ nirbīja-, ¹²⁸ sabīja-, ¹²⁹ śrīṅghalā-, ¹³⁰ druti-, ¹³¹ bāla-, ¹³² kumāra-, ¹³³ taruṇa-, ¹³⁴ vṛddha-, ¹³⁵ mūrti-, ¹³⁶ and mahābandha¹³⁷ (11.65–89). The jalūkābandha is elaborately described (11.93–107).¹³⁸

The diseases, the treatment of which is dealt with in chapters twelve to twenty-five, are enumerated in the introductory verses of chapter twelve (12.1–8):¹³⁹ jvara, rak-tapitta, kāsa, śvāsa, hidhmā, vaisvarya (= svarabheda), kṣaya (= rājayakṣman), aroca, praseka, chardi, hṛdroga, tṛṣṇā, madyodbhava (= madātaya), arśas, udāvarta, atisāra, grahaṇyarti, pravāhin, viśūci, vahnimāndya (= agnimāndya), mūtrakṛcchra, aśmarī, meha, somaroga, piḍikā, vidradhi, vṛddhi, gulma, śūla,¹⁴⁰ udara, pāṇḍu, śopha, visarpa, kuṣṭha, śvitra,¹⁴¹ nabhasvat (= vātavyādhi), vātāśra (= vātarakta),¹⁴² vandhyā (infertility), garbhīnīruj, sūtikāroga, bālaroga,¹⁴³ unmāda, apasmṛti, netraroga, karṇaroga, nāsāroga, āsyaroga (= mukharoga), śīroroga, vṛṇa, bhaṅga, bhagandara, granthi and related diseases,¹⁴⁴ kṣudraroga, and guhyaroga.¹⁴⁵

Noteworthy features of the nosology of the *Rasaratnasamuccaya* are: a disease called lohala (15.78);¹⁴⁶ seven types of vardhma (18.11);¹⁴⁷ a list of the eight mahā-rogas at the beginning of chapter twenty-one: vātavyādhi, aśmarī, kuṣṭha, meha, udara, bhagandara, arśas and grahaṇī (21.1); descriptions of śītavāta (21.2), sparśavāta (21.12) and raktavāta (21.42); nine types of vandhyā: ādivandhyā, raktajā, pittajā, kaphajā, saṃnipātajā, bhūtajā, devajā, abhicārājā (22.1–2); a male, incapable of procreation, is called vandhya (22.3); women with four more types of disorders of fertility are called garbhasrāvi,¹⁴⁸ mṛtavatsā,¹⁴⁹ strīprasūti,¹⁵⁰ and kākavandhyā (22.4);¹⁵¹ the list of nose diseases mentions six varieties of pīnasa (24.19);¹⁵² kṣayajāśīroroga and anantavāta are absent from the list of diseases of the head (24.71); the treatment of baldness and premature greying of the hair are discussed after the section on diseases of the head (24.82–90); khaṇḍakeśa and cācāroga are used as synonyms of baldness (indralupta; 24.82 and 87); the list of kṣudrarogas consists of vyaṅga, kacchapa, nīlikā, kunakha, viddha,¹⁵³ utkoṭha, koṭha,¹⁵⁴ alasa, kakṣā, ruddhaguda, prasupti,¹⁵⁵ vivṛtā, visphoṭa, valmīka, vispha,¹⁵⁶ kadara, ajagalli, jatumaṇi, andhālajī, rājikā, kṣudrā,¹⁵⁷ lāñchana, śarkarā, yavaprakhyā, agnirohiṇī, jālāsmagardabha,¹⁵⁸ vidārī, masūrīkā, padmakāṇṭaka, gardabhi, śarkarārbuda, maṣa, ānandadūṣikāh,¹⁵⁹ gaṇḍāhvayā,¹⁶⁰

panasikā, and irivellikā (25.1–2).

Some interesting technical terms are acalā (= manāṣīlā), kaṅkaṇā (= gandhaka) and vaiṣṇavīsenā (= haritālā) (12.97).¹⁶¹

Some noteworthy names of plants and substances of vegetable origin are: ādhārī (17.47), agniparnī (14.73),¹⁶² agniyugma (15.65),¹⁶³ ambhodhi (30.64),¹⁶⁴ ari (17.68),¹⁶⁵ bhūdāru (18.163),¹⁶⁶ candrāvati (11.94),¹⁶⁷ ciratikta (16.68),¹⁶⁸ dhvaṃsī (10.94),¹⁶⁹ gajāṅkinī (16.78),¹⁷⁰ gañjā (15.76), harilatā (14.73),¹⁷¹ hiyāvalī (16.149; 17.113; 21.28),¹⁷² hiyāvalli (12.100),¹⁷³ jalamaṇḍapikā (18.216),¹⁷⁴ jayāyuga (19.35),¹⁷⁵ kādi (12.97),¹⁷⁶ kāmā (11.108 and 111),¹⁷⁷ kambukī (11.54),¹⁷⁸ kāpālī (10.94),¹⁷⁹ karālī (22.124),¹⁸⁰ karivijaya (17.69),¹⁸¹ khaṇḍī (22.72),¹⁸² kinī (15.76),¹⁸³ kurkuṭī (20.36),¹⁸⁴ mābāna (18.43),¹⁸⁵ mahābharī (18.19),¹⁸⁶ mahābherī (30.64),¹⁸⁷ mahiṣī (10.95),¹⁸⁸ meha (17.68),¹⁸⁹ nura (20.204),¹⁹⁰ peṭakārī (17.6),¹⁹¹ phalikā (17.17),¹⁹² raktaśākinī (16.147; 18.97),¹⁹³ rāmaśītalikā (13.10),¹⁹⁴ śākandha (18.131),¹⁹⁵ svarāṃśikā (20.198),¹⁹⁶ tīkṣṇaparnikā (16.93),¹⁹⁷ tittirīphala (12.58),¹⁹⁸ and uttamakaṇṭikā (10.86).¹⁹⁹

The author

The author does not mention his name, but refers to himself as the son of Siṃhagupta (1.8).²⁰⁰ The *Rasaratnasamuccaya* is generally attributed to an author called Vāgbhaṭa.²⁰¹ The question whether or not this Vāgbhaṭa is identical with the author(s) of the *Aṣṭāṅgharḍayasamhitā* and *Aṣṭāṅgasamgraha*, discussed by many scholars,²⁰² is no longer relevant, since it has been clearly established that the *Rasaratnasamuccaya* is much later than the two āyurvedic treatises.

The contents of the treatise indicate that the author was a Hindu, although some scholars claim that the maṅgala is of a Buddhist character.²⁰³

Date

Scholars defending the view that the son of Siṃhagupta who wrote the *Rasaratnasamuccaya* is the same as the Vāgbhaṭa, son of Siṃhagupta, who is the reputed author of the *Aṣṭāṅgharḍayasamhitā* and *Aṣṭāṅgasamgraha*, tend to ascribe an early date to the work.²⁰⁴

Arguments disproving this identity and supporting a much later date were collected by P. Cordier,²⁰⁵ Gaṇanāthasena,²⁰⁶ P.V. Sharma,²⁰⁷ S. Ārya,²⁰⁸ and others.²⁰⁹

Decisive pieces of evidence are the borrowings from the *Rasārṇava*, *Rasaḥṛdaya*, *Rasendracūḍāmaṇi* and *Rasaratnākara*, and a formula attributed to Nityanātha (27.115–118).

The reference to somaroga (12.3) implies that the *Rasaratnasamuccaya* is later than Vaṅgasena's *Cikitsāsārasamgraha*. The quotations from the *Rasaratnākara* point to a period posterior to the first half of the fifteenth century.

A plant name found in the chapters on therapy indicates that the author of the *Rasaratnasamuccaya* probably belongs to the sixteenth century.²¹⁰ The quotations from the *Rasaratnasamuccaya* and *Rasavāgbhaṭa* in Mahādeva's commentary on

Bindu's *Rasapaddhati* prove that he is earlier than the first half of the seventeenth century. The earliest MS known dates from A.D. 1699.²¹¹

Commentaries

Commentaries in Sanskrit on the *Rasaratnasamuccaya* were written by Cintāmaṇiśarman Khare or Mahādeva Cimaṇājī Āpaṭe Khare, by the brothers Āsubodha and Nityabodha Senagupta, and by Hazārīlāl Sukul.

Cintāmaṇiśarman Khare's commentary,²¹² called *Saralārthaprakāśinī*, is an elaborate work, explaining the full text of the *Rasaratnasamuccaya*.

Works and authorities quoted or referred to are: *Aṣṭāṅgharḍaya* (2, 5), Bhairava (1, 119),²¹³ *Bṛhadyogatarāṅginī* (16), Caraka (2), *Cikitsākalikā* (59), *Gītā* (46), Govinda (1), *granthāntara* (6, 49, 54, 55, 59, 72, 104, 106, 111, 116, 122, 123, 222), *Kāmaratna* (2), *Kuṇḍārka* (67),²¹⁴ *Madanavinodanighaṇṭa* (14), Manu (49), *Mārkaṇḍeyapurāṇa* (49), Nāgārjuna (39, 84), *Nāgārjunatantra* (2), *Nighaṇṭa* (39), Nityanātha (1, 2, 53, 65), Pūjyapāda (1, 2), *Purāṇa* (51), *Rājānighaṇṭa* (46), *Rasaḥṛdaya* (1, 12, 14, 21, 22, 23, 32, 70, 73, 74, 76, 84, 88, 89, 99, 104, 106, 122), *Rasaḥṛdayaṭīkā* (27, 86), *Rasarājasundara* (13, 97), *Rasaratnākara* (14, 15, 33, 38, 65, 73, 74, 85, 91, 108, 112, 115), *Rasārṇava* (4, 5, 19, 20, 21, 22, 28, 32, 35, 36, 37, 55, 70, 72, 73, 84, 88, 90, 91, 100, 105, 120, 124, 125, 126), *Rasasamketakalikā* (20, 63, 76), *Rasasāra* (1, 17, 18, 29, 30, 36, 41, 75, 78, 90, 94, 95, 96, 98, 99, 100, 102, 103, 121, 122, 123, 124, 125), *Rasāvatāra* (117), *Rasendrasārasamgraha* (6, 56), Rāvaṇa (2,²¹⁵ 8,²¹⁶ 32,²¹⁷ 40),²¹⁸ *Śivaśaktisamgamatantra* (22),²¹⁹ Somadeva (33), śruti (5, 8), Suśruta (2), Trimalla's *Tarāṅginī* (23, 50, 84), Trimallabhaṭṭa (59), *Uddīśatantra* (2), Vāgbhaṭa (2), *Yogaratanākara* (2), and (Trimallabhaṭṭa's) *Yogatarāṅginī* (54, 84).

Plants mentioned in the *Rasaratnasamuccaya* are often described; their names in many regional languages are added.²²⁰

Variant readings are occasionally recorded.²²¹

Cintāmaṇiśarman Khare was a Cittapāvana brāhmaṇa of Kauśīkagotra, the youngest son of Vāmana and Manūbāi; he was born in a village called Guhāgara, near Ratnāgiri in Koṅkaṇa (Mahārāṣṭra) in the year 1866 or 1867.²²²

The commentary by Āsubodha and Nityabodha Senagupta, called *Rasaratnasamuccayaabodhinī*,²²³ covers the whole of the *Rasaratnasamuccaya*. This elaborate commentary quotes from or refers to the following works and authorities: Amara, Amogha (28.59–83),²²⁴ *Amoghatantra* (5.136–140),²²⁵ Atri (1.56), *Atrisamhitā* (2.26;²²⁶ 9.41;²²⁷ 25.58–60),²²⁸ *Bhagavadgītā* (1.44), *Bhāgavata* (1.56; 5.5), *Bhaiṣajyaratnāvalī* (3.52; 24.111–114, 121, 122; 25.58–60 and 98; 27.20 and 115–118), *Bhāratānuśāsanika* (1.6),²²⁹ Bhāvamīśra (5.26, 45, 149; 24.29; 25.38), *Bhāvaprakāśa* (2.1, 37–42, 142; 3.35, 101, 123, 148; 4.27; 5.1 and 102–103; 9.6–8; 10.53–54, 59, 60; 24.12; 28.3; 29.19; 30.71), Bhoja (24.29, 106, 137; 28.59–83),²³⁰ *Brahmavaivarta* (11.1–3), Cakra (22.126, 141, 152, 153; 23.67; 24.85–86, 90, 122; 25.51–52 and 83–85; 28.59–83), *Cakradatta* (22.93–96; 24.93 and 136; 25.42; 28.37 and 41–45,

59–83; 30.31 and 61), *Cakrasaṃgraha* and *Cakrapāṇi*(saṃgraha) (10.80; 12.11; 17.11; 18.68; 22.108; 23.6; 24.13 and 138; 25.4, 45, 50, 73–74, 101–105; 28.59–83; 30.31, 32, 33, 60), Cakṣuṣya (24.71),²³¹ Caraka, *Devīśāstra* (18.181), *Dravyaguṇa* (30.71), *Gāruḍa* (4.28),²³² *Gītā* (1.44, 48, 51),²³³ *granthāntara*, *Hārīta* (27.1), Kāśyapa (25.106), *Līlāvātī* (10.4),²³⁴ Mādhava (24.105; 28.59–83),²³⁵ Mādhavakara (24.71 and 91),²³⁷ *Madhukośa* and *Madhukośakṛt* (20, 117–123 and 186; 24.71),²³⁸ Manu (1.47), *Manusaṃhitā* (5.4), *Mātrkābheda* (5.2), *Medinī* and *Medinīkośa* (10.4; 12.10; 22.116–120; 24.100–101), Nāgārjuna (28.59–83), *Nāradaśmṛti* (27.128–144), *Nighaṇṭurāja* (4.50), *Paribhāṣāpradīpa* (8.1; 10.75), *Pātañjala* (28.59–83), *Patañjali* (5.136–140), *Rājanighaṇṭu* (3.101; 4.1, 2–4, 50, 63–68; 5.2, 150, 194, 206; 6.39; 8.86; 10.71–73 and 82–83; 16.92–96 and 149–151; 18.78–92; 21.26–27; 24.106; 28.3; 30.34), Rāmasena (18.116–123), *Rasakaumudī* (16.129–138), *Rasaratnākara* (1.33; 2.4, 5–8; 5, 99, 100; 15.64, 65; 16.142–145; 17.2–4, 9–10, 11, 19–21, 43–44; 18.70–71, 96–100, 102–103, 116–123, 215–218; 19.14–18, 19–22, 32–34, 42–44, 45–53, 94–95, 99, 100–103, 107–111; 20.22, 41–46, 137–141, 142–146, 147–150, 225–226, 227–228; 21.3–7, 138–140, 152–153, 154, 157, 161, 162–164, 165–166; 22.114; 23.36; 24.10, 75, 92, 100–101, 109, 111–114, 122; 25.21, 51–52, 58–60; 27.14–16, 23–25, 31–38, 115–118; 28.8, 10, 12, 14, 15, 18, 27), *Rasendracintāmaṇi* (1.31–32, 33, 71, 83; 2.5–8, 69; 5.2, 100, 136–140, 150, 225–230; 6.27–57; 8.69, 70, 86, 88; 9.31–32; 10.53–54; 11.15–16; 12.18; 16.146; 18.116–123; 19.19–22, 90; 20.89–99, 142–146, 215–217; 21.20, 35–39, 162–164; 22.30–40, 41–46; 27.1, 4, 5; 30.7–9, 19–20, 92–95), *Rasendrasāra* (2.13; 8.29; 11.27–28 and 48; 14.2–13; 16.154–156; 17.8, 9–10, 19–21, 135–138, 139–140; 19.14–18; 21.9–11, 20, 35–39, 49, 60, 118–129, 162–164; 24.111–114; 27.20; 29.142–155 and 156),²³⁹ *Rasendrasārasaṃgraha* (1.33, 71, 83; 2.1, 5–8, 14–15, 21, 23, 65; 10.53–54; 12.18; 13.49–50; 14.36–50; 15.64; 16.90–91, 129–139; 17.28–29 and 135–138; 18.66–67, 70–71, 96–100, 102–103, 116–123, 215–218, 219–220; 19.14–18, 19–22, 32–34, 42–44, 90, 100–103; 20.1, 89–99, 151–153, 215–217, 225–226, 227–228; 21.35–39, 118–129, 162–164, 167–168), *Rasendrasāraavyākhyā* (18.116–123), *Raseśvaradarśana* (1.76, 77, 78; 6.60), *Ratnamālā* (3.52), *Rudra* (10.4),²⁴⁰ *Rugviniścaya* (22.143–144; 25.1–2), *Rugviniścayakṛt* (23.28),²⁴¹ *Śaivasiddhānta* (17.1), *Sārakaumudī* (28.12), Śāringadhara (3.96; 4.20; 8.89; 27.26–30), Śāśvata (5.77),²⁴² *Siddhayoga* (20.35; 22.124; 23.74; 24.87, 94, 107; 25.68, 90, 101–105; 28.39–40, 41–45, 46–50; 29.80–81),²⁴³ Śivādāsa (12.11; 22.126; 24.85–86, 90, 122, 123; 25.42; 28.39–40, 59–83; 29.104–106),²⁴⁴ Śivādāsaavyākhyā (24.87; 25.68),²⁴⁵ Somadeva (8.1), Śrīkaṇṭha (24.91),²⁴⁶ Śruti, Suśruta, *tantrāntara*, *Tattvacandrikā* (29.104–106),²⁴⁷ *Tattvacandrikākāra* (24.41; 28.46–50), *Ṭoḍarānanda* (3.96), *Trivikrama* (18.116–123), *Vācaspatya* (3.142),²⁴⁸ Vāgbhaṭa, Vāṅgasena (24.90), Varāha (18.205–214),²⁴⁹ Varāhaċārya (26.22), Vṛnda (24.18, 35, 40, 41, 120),²⁵⁰ Vyākhyākusumāvalīkāra (28.46–50),²⁵¹ and *Yogarātnākara* (2.75–76; 23.45; 24.16–17, 118, 122, 123, 136; 25.37, 38, 39, 88, 93; 28.12 and 27).

The *Bodhinī* is an interesting and useful commentary; it gives much attention to the text of the *Rasaratnasamuccaya*; a large number of variants and parallels are discussed

by the authors, who were Bengali brāhmaṇas, sons of the well-known Jīvaṇanda Vidyā-sāgara.

Hazārīlāl Sukul's *Dīpikā* on the *Rasaratnasamuccaya* quotes from or refers to the following works and authorities:²⁵² Amara (often), *Ānandāśramīya* (3, 64, 124, 137, 245, 297, 309, 375),²⁵³ Āśubodha (322),²⁵⁴ *Āyurvedaprakāśa* (53, 88, 91, 105, 133, 147, 168, 202, 269, 276), bhagavantah (24), *Bhāratiyaśāyanaśāstretrihāsa* (370, 383),²⁵⁵ *Bhāṣānibandha* by Mallikṛita (285),²⁵⁶ *Bhāvacinātamaṇi* (419),²⁵⁷ Bhāvamīśra (412), *Bhāvaparakāśa* (127, 412, 414, 437), Bindu (72, 80),²⁵⁸ *Brahmapurāṇa* (4), Caraka (45, 64), Caturbhūja (73),²⁵⁹ Cūḍāmaṇi (39, 42, 74, 95, 146, 151, 152, 158, 192, 195, 210, 227, 230, 239, 247, 370, 376, 410, 411, 412, 445),²⁶⁰ Dattarāma (369, 421, 424, 425),²⁶¹ *Devīśāstra* (483), Dharaṇīdhara (352, 446),²⁶² Dhunḍhuka(nātha) (12, 13, 15, 16, 70, 214),²⁶³ Gaṇeśa (290),²⁶⁴ Gayādāsa (413),²⁶⁵ *Gītā* (24, 25),²⁶⁶ Gorakṣa (167), Govinda (123, 449), Govindabhikṣu (361),²⁶⁷ Govindācārya (188), Govindapādāh (3, 15, 47, 70, 71, 97, 325),²⁶⁸ *granthāntara*, Hariprapanna (102),²⁶⁹ *Haṭhapradīpikākāra*,²⁷⁰ Jivārāma (31, 113, 293, 399, 421, 422, 424), *Jivārāmīya* (214, 428),²⁷¹ Jyesthāmalla (322, 424, 425),²⁷² Kālidāsa (9),²⁷³ *Kālikātpāṭha* (96), *Kālikāṭīya* (31, 137, 140, 160, 178, 214, 269, 366, 386, 477),²⁷⁴ Kāśīya (449),²⁷⁵ Kośa (17, 294, 296, 309, 322, 468, 484), Kṛṣṇadeva (484),²⁷⁶ Kṛṣṇarāva (7),²⁷⁷ *Kumārasambhava* (30),²⁷⁸ *Lauhapaddhati* (234), *Lohapaddhati*, (234, 235), Mādhava (13, 16, 45, 48, 49, 51, 63, 70, 74, 80, 81, 87, 121, 150, 207, 216, 239, 269, 452, 482), Mādhavācārya (188),²⁷⁹ Mahādeva (38, 74, 75, 80, 154, 158, 410),²⁸⁰ Medinī (315, 469, 484), *Mujarrabāt-e-Akbarī* (393),²⁸¹ Nāgārjuna (106, 159),²⁸² Nārāyaṇa (88, 135, 136, 137, 165, 174, 239, 266, 322, 357, 361, 412, 414, 439),²⁸³ *Nārāyaṇagrantha* (373), *Nighaṇṭu* (261, 283, 301, 426, 449, 469),²⁸⁴ Nirāñjana (19, 135, 323, 398, 422, 435),²⁸⁵ Nityanātha (3, 449), Padmanābhasūnu (85, 94, 188, 398),²⁸⁶ *Padmapurāṇa* (203), *Pāradasaṃhitā* (366, 370, 446),²⁸⁷ *Pūṇīya* (31, 140, 160, 178, 181, 214, 363, 366, 375, 386, 422, 447, 477),²⁸⁸ *Puṇīyātippana* (111),²⁸⁹ *Purandararāhasya* (167), Raghunātha (113, 162, 165, 176, 267, 328, 365, 395, 444, 468, 484),²⁹⁰ Raghunāthavyākhyā (137), *Rasadarpaṇa* (168), *Rasahrdaya* (27, 28, 55, 57, 114, 137, 446),²⁹¹ *Rasakāmadhenu* (77, 105),²⁹² *Rasapaddhati* (76, 83, 101),²⁹³ *Rasaprakāśasudhākara* (105, 114, 116, 136, 140, 182, 188, 275, 276, 446),²⁹⁴ *Rasarājapaddhati* (446), *Rasarājaśaṃkara* (458), *Rasarājasundara* (106, 182, 188, 365, 425),²⁹⁵ *Rasaratnākara* (155, 214, 449), *Rasaratnapradīpikā* (123), *Rasārṇava* (64, 65, 67, 69, 81, 104, 200, 200 ka, 204, 230, 297, 340, 365, 426, 446), *Rasasāgara* (372), *Rasasāra* (437, 439),²⁹⁶ *Rasatarāṅgīnī* (144),²⁹⁷ *Rasāyanasāra* (76, 77, 266, 450),²⁹⁸ *Rasendra* (116, 120, 254), *Rasendracūḍāmaṇi* (263, 321, 356, 368, 375, 382, 426),²⁹⁹ *Rasendrakalpadruma* (446), *Rasendrasārasaṃgraha* (144, 436, 452), Praphulla Rāya (358),³⁰⁰ *Śabdārthacintāmaṇi* (259, 313),³⁰¹ Sadānanda (98, 172),³⁰² *Śaktyavatāra* (445), Śāligrāma (3, 284, 313, 420, 483),³⁰³ Somadeva (127, 129, 321, 356, 376, 395),³⁰⁴ Śyāma (206, 208, 224, 225, 252),³⁰⁵ Śyāmasundarācārya (450), *Ṭoḍarānanda* (393, 402, 457), Umeśa (54),³⁰⁶ Vāgbhaṭa, *Vaidyādarśa* (414), *Vaidyakaśābdasindhu* (299),³⁰⁷ *Vaijayanī* (309),³⁰⁸ *Vaiṅkaṭeśvarīya* (181),³⁰⁹ *Vāmanapurāṇa* (64), *Veda* (64), *Vedānta*

(18), *Viṣṇudharmottara* (246), *Viśva* (94),³¹⁰ *Viśveśvarīprasāda* (449),³¹¹ *Vyāsa* (31, 63, 65), *Yādava* (64),³¹² and *Yaśodhara* (44, 50, 51, 59, 61, 85, 87, 89, 135, 137, 158, 197, 359, 375, 399, 412, 414).³¹³

The author of the *Dīpikā* refers to the views of modern scholars,³¹⁴ to those of scientists,³¹⁵ to the tradition adhered to by himself,³¹⁶ etc. The names of plants and substances in various parts of India are repeatedly mentioned.

Hazārīlāl's views are quoted in Gulrājsarmamiśra's commentary on the *Āyurveda-prakāśa*.

The author was a son of Rāmanātha Sukul, of Bharadvājagotra, and lived in a village called Mahuvā near Kānyakubja.³¹⁷ He also wrote a work called *Rasendra-sampradāya*. He was a teacher at the Patnā Āyurvedic College.³¹⁸

Chapter 10

Rasārṇava and Rasārṇavakalpa

The *Rasārṇava*

The *Rasārṇava*¹ is one of the earliest and most important treatises on alchemy.

Contents²

The *Rasārṇava* consists of about 2,300 verses, arranged in eighteen chapters (paṭala). It is written in the form of a conversation between Śiva and Pārvatī.³

Chapter one (tantrāvatāra; 60 verses) is about jīvanmukti,⁴ obtained by means of mercury (4–31), the origin of mercury as Śiva's semen (33–36),⁵ the good results of venerating the rasaliṅga, the bad effects of despising mercury, the praise of mercury and those who practise the art in the proper way, etc. (37–60).

Chapter two (dikṣāvidhāna; 133 verses) begins with a description of the characteristics of a qualified guru (2–6), a pupil fit for initiation (7–14), and the female companion to be selected (15–35).⁶ It proceeds with an account of the construction of the workshop (maṇḍapa) of the alchemist⁷ and the elaborate rituals to be performed (dikṣā) before beginning the alchemical operations (36–133).

Chapter three (mantranyāsa; 33 verses) continues the description of the preparatory rituals, accompanied by many mantras.

Chapter four (yantramūṣāgnivaraṇa; 65 verses) opens with an enumeration of the utensils, apparatus and substances that should be present in the workshop (2–6). A number of yantras are dealt with: dolāyantra (7), jārāṇāyantra (8–14), mūṣāyantra or somānālayantra (15), garbhayantra (16–19), guptayantra (20–25), and haṃsapākayantra (28–29),⁸ the various kinds of earth (30–35), and a series of mūṣās: vajramūṣā, varamūṣā, prakāśamūṣā, andhamūṣā, and bhasmamūṣā (36–43).⁹ The functions of the rakta-, śukla- and bīḍavarga are defined (44–46); substances for sealing a mūṣā (mūṣālepa) are described (47–48), followed by the colours of the flames which are specific for a particular substance (49–51), the characteristics of purified loha (52), definitions of pratīvāpa, niṣeka and snapana (53–54), and lohāvarta (55). The chapter ends with descriptions of koṣṭhaka, the vaṅkanāla, khalla, mardaka (56–60), and, finally, purificatory procedures (56–63).

Chapter five (oṣadhinirṇaya; 45 verses) lists the items of groups of vegetable and other substances employed in alchemical operations: niyāmaka plants (2–7), nirjīvakāraka plants (8–13), māraka plants (14–16), rasabandhakara plants (17–21), drāvaka plants (22–23), krāmaka plants (24–25), plants useful for rasāyana (526), the groups called mūlikā and pañcaratna (27–29), the substances called kṣāra (30), the

groups of substances called *amlavarga*, *pañcalavaṇa*, *mahāviṣa*, *upaviṣa*, *tailavarga*,¹⁰ *mūtravarga*, *pittavarga*, *vasāvarga*, *viḍvarga*,¹¹ *raktavarga*, *pītavarga*, *śuklavarga*, *drāvaṇavarga*,¹² and *śodhanavarga* (31–42).

Chapter six (*abhrakādīlakṣaṇasaṃskāranirṇaya*; 139 verses) deals with *abhraka* (*mica*), *kānta* (*loha*), *vajra* and *vaikrānta*. The subjects of the section on *abhraka* are: the origin of *mica*, its four colours (yellow, black, white, and red) and four varieties (*pināka*, *dardura*, *nāga*, *vajra*), the properties of the four varieties (2–9), the purification of *mica* (10–13), the extraction of its essence (14–16), and the liquefaction of the essence (*druti*; 17–39). The section on *kānta* begins with an enumeration of its five types, their characteristics, properties and uses (40–54); the five types are *bhrāmaka*, *cumbaka*, *karṣaka*, *drāvaka* and *romaka*. The subjects that follow are the preparation of *sūtaloha* (55–57), and the purification and liquefaction of *kānta* (58–64). Section three, on diamonds (*vajra*), is concerned with their origin and types (*brāhmaṇa*, *kṣatriya*, *vaiśya*, *śūdra*; male, female, *napuṃsaka*), the characteristics, properties and uses of these types (65–78), the purification of diamonds, their killing and liquefaction (79–122). Section four is about the origin of *vaikrānta*, its seven types (white, yellow, red, dark-blue, dove-coloured, coloured like a peacock's tail, emerald-green) and their uses (123–129), its purification, the extraction of its essence, and liquefaction (130–138).

Chapter seven (*mahārasoparasalohalakṣaṇasaṃskāratadrāvaṇamāraṇanirṇaya*; 154 verses) deals with the *mahārasas*, *uparasas*, metals (*loha*) and gems (*ratna*). The section on the *mahārasas* begins with their enumeration: *mākṣika*, *vimala*, *śāila*, *capala*, *rasaka*, *sasyaka*, *darada* and *sroto'ñjana* (2); it proceeds with the origin, purification and extraction of the essences of *mākṣika* and *vimala*, followed by their medicinal properties and uses (3–17); two varieties of *mākṣika* are distinguished (yellow and white) and three varieties of *vimala* (white, yellow and red). The next subjects are *śilājatu* (= *śāila*), its origin, varieties (*patita* and *apatita*), names, and purification (18–22); the varieties of *capala* (yellowish, white, reddish, black) and their uses, the etymology of *capala*, its killing (23–27); *rasaka*, its three varieties (resembling *mṛttikā*, *guḍa* and *pāṣāṇa*),¹³ its purification, the extraction of its essence, its synonyms, the medicinal properties of *rasaka* and its essence (28–38); *sasyaka*, its origin, purification, the extraction of its essence, its medicinal properties (39–45); *darada* (*cinnabar*), its names and its three varieties (*carmāra*, *śukatuṇḍaka*, *haṃsapāda*),¹⁴ the extraction of mercury from it, its medicinal properties (46–52); *sroto'ñjana*, its purification and properties (53–54).

The section on the *uparasas* begins with the enumeration of the items of this group: *gandhaka*, *tālaka*, (*manah*)*śilā*, *saurāṣṭrī*, *khaga* (= *kāśisa*), *gairika*, *rājāvarta* and *kaṅkuṣṭha* (56); it proceeds with the mythical origin of *gandhaka* (*sulphur*),¹⁵ its three varieties (coloured like the beak of a parakeet, yellow, white), and its purification (57–73); *tālaka*, its two varieties (*paṭala* and *piṇḍa*), its purification and the extraction of its essence (74–77); the purification and liquefaction of (*manah*)*śilā* (78); the purification of the two varieties of *saurāṣṭrī* (white and black) and the extraction of its essence (79–80); the purification of the three varieties (white, black, yellow) of *kāśisa* (81–82);¹⁶ the purification of the three varieties of *gairika* (*rakta*-, *hema*-, *kevalagairika*) and the extraction of a white and a red essence (83–84); the purification of the two varieties of

rājāvarta (*gulikā* and *cūrṇa*) and the extraction of its essence (85–87); the description of *kaṅkuṣṭha* (88); a general method of purifying the *mahārasas* and *uparasas* (89–90); the preparation of a *vajrapīṇḍī*, useful in extracting the essence from the *mahārasas* and *uparasas* (91–95).

The section on the metals (*loha*) begins with their enumeration: gold, silver, copper, iron (*tikṣṇa*), tin and lead (96–98). The subjects dealt with are: the three varieties of gold (*rasaja*, *kṣetrāja*, *lohasaṃkaraja*); the best type of gold is that of sixteen *varṇa*¹⁷ (99–101); the purification of gold (102); the two varieties of silver (white and black) and their purification (103–104); the purification of the two varieties (red and black) of copper (105–106), the three varieties (*rohaṇa*, *bājara*, *capalālaya*) of *tikṣṇa* or *kānta* (107–109), the two varieties (white and black) of tin, and lead (110–115); the liquefaction of the metals (118–136).

The last part of the chapter is concerned with the liquefaction of gems (137–146), the killing of metals (147–149), and the praise of some important substances (150–153).

Chapter eight (*bījasādhana*; 88 verses) gives a detailed account of the power (*rāgasamkhyā*) of diverse substances used in colouring mercury (2–15). The next subject is the preparation of *bījas* (16–23), divided into *hema*- and *tārābīja*,¹⁸ *kalpita*-, *rañjita*- and *pakvabīja*; a *kalpitabīja* is of two varieties, *śuddha* and *miṣra*. The other subjects are the preparation of mixtures of two (*dvandvamelāpana*) or more (*melana*) substances (24–40), such as *hemābhra*, *tārābhra*, *tikṣṇābhra*, *vaṅgābhra*, *nāgābhra*; the colouring (*rañjana*) of mercury by means of *kalpita*- and *rañjitabījas* (41–49), and *pakvabījas* (50–57); the preparation of *hema*- and *tārābīja* (58–72), *rañjanabīja* (75–79), *rañjanatāila* (80–82), and *sāraṇatāila* (83–85).

Chapter nine (*viḍakathana*; 19 verses) describes *viḍas*,¹⁹ employed in the process called *jāraṇa*. Some of these *viḍas* bear names: *vaḍavāmukha*,²⁰ *vahnimukha*, *jvālāmukha*.

Chapter ten (*rasaśodhana*; 60 verses) deals with the names of mercury and its five varieties (12–9), and the names of eight *saṃskāras* and their effects: *svedana*, *mardana*, *cāraṇa*, *jāraṇa*, *drāvaṇa*, *rañjana*, *sāraṇa* and *krāmaṇa* (10–12). Five *gatis* of mercury are mentioned: *mala*-,²¹ *haṃsa*-,²² *mala*-, *dhūma*-²³ and *jīvagati*,²⁴ together with their characteristics (13–16).²⁵ Five *avasthās* of mercury are described: *dhūma*, *ciṭiṭi*, *maṇḍūkapluti*, *akampa* and *vikampa*; these are removed by means of *niyamana* (17–22).²⁶ The *saṃskāras* which were enumerated in some preceding verses are elucidated (23–28). Three *doṣas* of mercury are mentioned: *viṣa*, *vahni*, *mala* (30–31). The system of weights (*mānaparibhāṣā*) is discussed (32–37). The remaining part of the chapter is devoted to a number of *saṃskāras*: *svedana*, *mardana*, *pātana*, *nirodha*, *niyamana*, and *dīpana* (38–59);²⁷ the seven *kaṅcukas* (42) or *upādhijadoṣas* are referred to (48).

Chapter eleven (*bāla-jāraṇa*; 221 verses) is mainly about *cāraṇa* and *jāraṇa* (1). *Jāraṇa* is of two types: *bāla*- and *baddhajāraṇa* (7). The order of a series of operations is elucidated (8–10). *Jāraṇa* of *mica* is said to be of two (*patrābhrajāraṇa* and *satvajāraṇa*) or three (*samukha*, *nirmukha*, *vāsanāmukha*) types (14–15).²⁸ These processes are described in detail (16–80ab). The state of mercury and its appearance are dependent on the amount of *grāsa* (*abhraka*, *abhrakasattva*, *nāgābhra*, etc.) added;

six states are distinguished: *daṇḍadhārin*, *jalaukāśama* (resembling a leech), *kākaṣṭhāsama* (resembling the droppings of a crow), *dadhimaṇḍasama* (resembling whey), *navanītasama* (resembling butter) and *golakākāra* (resembling small balls) (50–54). The five *avasthās* are mentioned again (75).²⁹ The amount of mica digested (*jīṛṇa*) by mercury determines whether the product is called *bāla*, *yauvanastha* or *vṛddha* (77–80ab).³⁰ If *abhrakasattva* is not available, a *grāsa* consisting of *kānta* or *tīkṣṇa* may be employed as a substitute (80cd–81).

Subjects discussed after this section on the *jāraṇa* of *abhraka*(*sattva*) are the *jāraṇa* of gold (86–89), the types of *jāraṇā* known as *bhūcarī* and *khecārī* (90–107), and two more types of *jāraṇā* (108–124).

The next subject is the *jāraṇa* of gems (125–137). The verses which follow are about mercurial preparations ensuring *vedha* (138–163), the *jāraṇa* of liquefied sulphur and lead (164–175), the colouring of mercury (176), *garbhadruti* (177–179ab), the preparation of *tārāriṣṭa* (179cd–180), the preparation of *nāgābhra* and its *jāraṇa* (180–191), *krāmaṇa* (197), seven forms of mercury: *mūrchita*,³¹ *mṛta*,³² *jalūkābaddha*, *mūrtibaddha*, *paññabaddha*,³³ *bhasman* and *khoṭa* (198), and their description (199–208).

The order in which several operations are to be performed is mentioned: *śodhana*, *grāsamāna*, *jāraṇa* of *sattvas*, *garbhadruti* and *bāhyadruti*, *jāraṇa* of gold, *puṭa* of divine herbs, *bandha* of gems, *rañjana*, *jāraṇā*, *anusāraṇā*, *krāmaṇa*, and finally *dāna* (210–212).³⁴

The chapter ends with verses on the actions of processed mercury.

Chapter twelve (*rasabandhana*; 382 verses), the longest, deals with the *bandhana* of mercury, an art unknown to *Brahmā*, *Viṣṇu* and *Indra* (2). Mercury is said to be immediately solidified (*baddha*) in the vicinity of a *rākṣasa* called *Prayoga*, who lives in the region between *Gaṅgā* and *Yamunā* (3).

The first part of the chapter consists of a long series of *kalpas*, describing preparations of particular plants (*divyauśadhi*) and some other substances used in achieving alchemical aims, specifically *rasabandha*. The contents of this part of the chapter are closely related to the second part of the *Rasārṇavakalpa* of the *Rudrayāmala*.³⁵ A first series of *kalpas* deals with *niśācara* (4–26),³⁶ *ajānāyikā* (27–35),³⁷ *narasāra* (36–51), *kaṅkālakhecārī* (52–57), *mantrasimhāsani* (58–64), *surasiṃhanī* (65–67),³⁸ and *harīṇḍarī* (68–70). Some verses on the excellence of the sixty-four *divyauśadhis* or *kulauśadhis* for alchemical operations and the inferiority of the *trṇauśadhis* follow (71–83).

The second series of plants dealt with consists of *divyauśadhis*: *kṣmāpāla*³⁹ and *gajārī* (84–96), *caṭulapaṇī* (97),⁴⁰ *ekavīrā* (98), *raktakañcukī* (99), *vṛścikāpatṭrikā* (100), *vajrakanda* (101–102), *lāṅgalikanda* and *karkoṭikanda* (103–104ab), *śukacañcu* or *śukatuṇḍī* and *haṃsapāḍī* or *haṃsāṅghri* (104cd–108), *trṇajyotiṣ* (109–111), *uccaṭī* (112–116),⁴¹ *raktasnuhī* (117–121), *sthalapadminī* (122–128), *kumudīnī* (129–131),⁴² the three varieties (white, red, deep blue) of *citraka* (132–140), *nāginī* (141–142),⁴³ *jyotiṣmati* (143–148), *dagdhārohā* (149–155), *kaṭutumbī* (156–165), *kṣīrakanda* (166–169), *tintinī* (170–171),⁴⁴ *śākavṛkṣa* (172–178), *devadālī* (179–182), and *śvetaguñjā* (183–188).⁴⁵

The second part of chapter twelve is devoted to other substances employed in the solidification (*bandha*) of mercury: *candrodaka* (189–211), *viśodaka* (212–231), *saṃjī-*

vanījala (231–258), *uṣṇodaka* (259–276), and *śailodaka* (277–327);⁴⁶ it ends with *rasāyanas*, in particular pills (*guṭīkā*), prepared by means of *śailodaka* (328–357), and *bhasmans* (358–382).

Chapter thirteen (*drutibandhana*; 31 verses) is concerned with *baddhajāraṇā*, a process said to be superior to *bālajāraṇā*, described in chapter eleven.

Three types of *bandha* are distinguished: *mūla-* or *vāsanaḥbandha*, *rasabandhana*, and *pākabandha*; *mūlabandha*, accomplished by means of the plants called *mūlikā*, is the best method (7–8). Three more types are: *piṇḍikā-*, *druti-* or *kṣaṇa-*, and *saṃkocabandha* (10–11). The larger part of the chapter gives an account of methods to achieve *drutibandha*.

Chapter fourteen (*vajrabandha*; 174 verses) describes many ways of achieving *bandha* by means of the *bhasman* of diamonds. Mercury, solidified (*baddha*) in this way, brings about *krāmaṇa* and *vedha*. The power of accomplishing *vedha* depends on the amount of mercury present in the mixture of substances. Ten varieties of the process called *saṃkalī* are described (7–18).

Pills (*guṭīkā*), consisting of mercury solidified by means of *vajrabhasman*, are said to have wonderful properties, if used in the prescribed way, accompanied by the appropriate mantras (19–36, 37–48, 49–56).

Chapter fifteen (*piṣṭistambhamahārasoparasavajrabandha*; 207 verses) begins with the *bandha* of mercury by means of several varieties of *vaikrānta* (2–47), by means of *kānta* (48–50), *capala* (51–62), *gandhaka* and *gandhapīṣṭikā*⁴⁷ (63–106), and *tālaka* (107–111). It goes on with several ways of making a *khoṭa* (= *baddhasūta*, solidified mercury), also called the *stambhana* of a *rasapiṣṭikā* (112–163). Five types of *bandha* are said to produce a *nigala* or *gola*: *khoṭa-*, *poṭa-*, *bhasma-*, *dhūli-* and *kalkabandha* (164). Several methods of making a *nigala* are described (165–185), followed by procedures aiming at *piṣṭikāstambhana* (186–205).

Chapter sixteen (*rasarañjana*; 110 verses) describes the liquefaction (*drāvaṇa*, *druti*) of solidified (*baddha*) mercury, followed by its digestion (*jāraṇā*) of diamonds and other precious and semi-precious stones. These and other similar processes result in the colouring of metals, making them resemble gold, and in the acquisition of a divine body.

Some *bandhas* are also dealt with (95–98: *cūrṇabandha*; 99–107).

Chapter seventeen (*lohavedha*; 166 verses) is concerned with the *saṃskāras* called *sāraṇa* and *krāmaṇa*, which result in *vedha*, the transmutation of base metals into silver and gold. The three stages of *sāraṇa*, called *sāraṇa*, *pratisāraṇa* and *anusāraṇa*, are described (2–5). Some methods of reducing the hardness of metals (*mṛḍukaraṇa*) are dealt with (106–114), as well as procedures enhancing the colour of the artificial gold (*varṇotkarṣaṇa*) and purifying it (118–151).

Chapter eighteen (*dehavedha*; 230 verses) describes the acquisition of a divine, immortal body, not subject to disease and decrepitude.⁴⁸

The chapter begins with the purification of one's body (*kṣetrīkaraṇa*; 2–22), preliminary to the consumption of the mercurial preparation called *āroṭa* (12). The *bhasman* of mercury that has digested diamonds is the best preparation one can take; the *bhasman* of mercury that has digested gold, silver, copper, *tīkṣṇa*, *capala*, *bājara*, *rohaṇa*, or a

common type of tīkṣṇa make one attain the position of Rudra, Viṣṇu, Brahmā, Kubera, Sūrya, Soma, Agni, or Indra respectively (23–25). The urine and faeces of the successful alchemist (sādhaka) turn soil and stones into gold and his drops of sweat convert the eight metals into gold (28–29).⁴⁹ The miraculous effects of the mercurial preparations taken by the practitioner are elaborately described. These effects depend on the type of preparation and its dosage (40–46 and 56–60). The attempts will be abortive, however, if the appropriate mantras are neglected which protect the adept against the attacks of all sorts of malevolent beings (100–106). The eight articles of food called kakāra should be avoided: kūṣmāṇḍa, karkaṭī, kāliṅga, kāravellaka, kusumbhaka, karkoṭa, kadali and kākamācīkā (120). Many more articles of food are prohibited (124–126) and numerous rules of behaviour are to be observed (121–123, 127–136, 144–146).

The disorders brought about by improper use (rasājūṣa) and their treatment are discussed (137–143).

Eight kinds of vedha of the body are distinguished: tvag-, māmṣa-, rakta-, asthi-, majja-, nāḍi-, dhātu- and kavacavedha; each kind also leads to a particular type of transmutation of a metal (147–153ab).

Several marvellous pills (guṭīkā) are described: vajrāṅgasundarī (174–177), sarvasiddhidā (179–181), some pills without a name, and a gola (195–199).

Sources are not cited by name. Once (7.18) a *granthāntara* is mentioned, which may be the *Carakasamhitā* or one of the other āyurvedic classics.⁵⁰ The *Āmaratantra* appears to be referred to in some MSS.⁵¹

The *Rasārṇava* is quoted or referred to in the *Amṛtasāgara*,⁵² the *pariśiṣṭas* of the *Ānandakanda*, the commentary on the *Aṣṭamahāmātrā*, the *Āyurvedaprakāśa*, *Āyurvedasaukhya*,⁵³ *Āyurvedīya Khanijavijñāna*, *Basavarājīya*,⁵⁴ *Bṛhadrasarājasundara*, *Bṛhadyogatarāṅgiṇī*,⁵⁵ *Capalanirṇaya* of the *Rasatarāṅgiṇī*,⁵⁶ a *Cikitsāsārasaṃgraha*,⁵⁷ *Gulrājśarmamiśra's* commentary on the *Āyurvedaprakāśa*,⁵⁸ *Hazārīlāl Sukul's* commentary on the *Rasaratnasamuccaya*, *Khare's* commentary on the *Rasaratnasamuccaya*, *Mādhava's* *Āyurvedaprakāśa*, *Nārāyaṇabhūpati's* *Nārāyaṇavilāsa*,⁵⁹ the *Pākāvalī*,⁶⁰ *Pāradasamhitā*, *Rasadhātuprakāśa*, *Rasakakṣāputa*, *Rasakāmadhenu*, *Rasāmṛta*,⁶¹ *Rasaprakāśasudhākara*, *Rasarājalakṣmī*, *Rasaratnasamuccaya*, *Rasasaṃgrahasiddhānta*, *Rasasindhu*, the commentary on the *Rasatarāṅgiṇī*,⁶² the *Rasatattva-vivecana*, *Rasayogasāgara*, *Rasendracintāmaṇi*,⁶³ *Rasendrakalpadruma*, *Rasendrapurāṇa*,⁶⁴ *Ranākaraśādhayogagrantha*, *Sarvadarśanasamgraha*,⁶⁵ *Somadevaśarma's* commentary on the *Āyurvedaprakāśa*, *Mallāri's* *Vaidyakalpataru*, the *Vaidyakasāroddhāra*, *Vaidyaśāstrapravartakācāryānāmasamuccaya*, *Revaṇa's* *Vīrabhaṭṭīya*, the *Yogaratanākara*,⁶⁶ and the *Yogatarāṅgiṇī*.⁶⁷

Anonymous quotations from the *Rasārṇava* are found in the *Rasajalanidhi*, *Mahadeva's* commentary on the *Rasapaddhati*,⁶⁸ the *Rasaratnasamuccaya*, and *Ṭoḍara's* *Āyurvedasaukhya*.

A number of passages from the *Rasārṇava* are nearly identical to passages from the *Rasahṛdaya*.⁶⁹ The *Rasendramaṅgala* borrows widely from the *Rasārṇava*.⁷⁰ Borrowings from the *Rasārṇava* or from a common source are also found in the *Kākaçaṇḍīśvarakalpatantra* and *Kākaçaṇḍīśvarīmata*.⁷¹

The *Rasārṇava* was one of the sources of the *Āyurvedaprakāśa*, *Kūpīpakvara-*

sanirmāṇavijñāna and *Rasendrasambhava*.

The *Rasārṇava* is mentioned in *Māṇikyadeva's* *Rasaratnasamuccaya*.

Special features

Alchemy and the philosophy on which it is based are declared to be superior to the six philosophical systems (śaddarśana), because of the importance of the conservation of the human body (piṇḍadhāraṇa) for those aiming at emancipation while still alive (jīvanmukti; 1.7–17). Alchemy is regarded as belonging to karmayoga, a way of life governed by the cultivation of either rasa (mercury) or vāyu (breath);⁷² both ways are described as parallel methods (1.18–22). The practitioner of the alchemical art should also be experienced in Haṭhayoga (1.26).⁷³

Four varieties of the rasaliṅga, to be worshipped by the alchemist, are distinguished, in increasing order of merit: made from mercury mixed with mica, mixed with a viḍa, prepared by help of mantras, and mixed with rasaka (1.44).

Members of all four varṇas may be accepted as pupils by a teacher (2.12). The female companions to be selected are, according to the characteristics they possess, called kākīṇī, kīkaṇī and kāñcīkācīṇī (2.19).

The construction of the alchemist's workshop (maṇḍapa) with its rasaliṅga, a process accompanied by rituals, is described in detail (2.38–103).⁷⁴ Many divinities should be worshipped, amongst whom are Nandin, Mahākāla, Bhṛṅgīrīṣa, Mahābala, Kumbhakārṇa, Sugrīva, Bhṛṅgika, Dṛḍhāyudha, the ten alchemical Dūtīs:⁷⁵ Lepikā, Kṣepikā, Kṣārikā, Rañjikā, Lohaṭī, Bandhakārī, Bhūcarī, Mṛtyunāśinī,⁷⁶ Vibhūti, and Khecari⁷⁷ (2.54 and 57–58), the four Śaktis: Mālīnī, Hemaśakti, Balā, and Vajraśakti (2.62), and the six divinities consisting of Mahākāla, Mahābala, Aghora, Vajravīra, Krodha, and Kaṅkāla (2.96–97).

Chapter three also refers to many divinities and other authorities, amongst whom are the four Siddhas, the eighteen excellent men,⁷⁸ Caṇḍaghaṇṭā, Bhairavī, and Caṇḍakāpālīnī (3.10–15). A number of mantras are referred to by name: dāmaramantra, cintāmaṇimahāvidyā, caṇḍikamahāmantra, aghorāstra, mahāpāśupatāstra (3.23–28), rasāṅkuṣamantra, and kubjikāmantra (3.29–32).

The *Rasārṇava* distinguishes five mahāviṣas (major poisons): saktuka, kālakūṭa, sitamustā, śṛṅgī and kṣṇaviṣa (5.33), and five upaviṣas (minor poisons): snuhī, arka, unmattaka, karavīra and lāṅgalī (5.34ab).⁷⁹

The *Rasārṇava* adds karṣaka to the usual four varieties of kāntaloḥa; it is regarded as the second best, next to drāvaka, the very best; both varieties are said to be suitable to alchemical and rasāyana purposes (6.40, 44, 48). Seven varieties of vaikrānta are described (6.127); the karbura type is not mentioned.

The list of mahārasas (7.2) is unusual in including darada (cinnabar) and sroto'ñjana, whereas abhṛaka (mica) and vaikrānta are omitted.⁸⁰ The *Rasārṇava* is the only rasaśāstra text listing sroto'ñjana as a mahārasa and excluding vaikrānta from the group.⁸¹

Two varieties of māksika⁸² are mentioned, yellow and white in colour (7.5). Their usual names, suvarṇa- and raupyamāksika, are absent from the *Rasārṇava*, where they are called tāpya and āvartaka (7.14). Three varieties of vimāla are distinguished: yel-

low, white and red (7.5); their usual names, hema-, tāra- and kāmasyavimala, are absent. The two varieties of śilājatu, patita and apatita (7.18), not known from other texts, may correspond to those usually called gomūtra- and karpūraśilājatu.⁸³ The four varieties of capala, white, yellow, red and black (7.23), are also mentioned in the *Rasapaddhati*, *Rasaratnākara* and *Rasendrapurāṇa*; the *Rasārṇava* and *Rasapaddhati* agree in regarding the white and yellow varieties as useful for alchemical purposes. The three varieties of rasaka, resembling mṛtikā, guḍa and pāṣaṇa (7.28–29), are peculiar to the *Rasārṇava*; its sattva, which may be zinc, is said to resemble tin (kuṭila; 7.35). The verses on sroto'ñjana (7.53–54) do not refer to the other varieties of añjana, described in many rasaśāstra texts.

The uparasa list of the *Rasārṇava* (7.56) is remarkable by its inclusion of rājāvarta, in common with the *Rasaratnākara* (III.1.57) and one of the lists found in the *Rasaśāstra* (6.8–9a). The three varieties of sulphur (gandhaka) (7.67) are also found in the *Rasapaddhati* (55), whereas many treatises add a fourth variety, black in colour. The two types of tālaka are called paṭala and piṇḍa (7.74); the paṭala type corresponds to the one called patra, patrin or dala in other texts. Varieties of manahśilā are not mentioned (7.78). A white and black variety of saurāṣṭrī are distinguished (7.79), a white, black and yellow one of kāsīsa (7.81). Three differently coloured varieties of gairika are mentioned (7.83), whereas most texts describe two varieties. The two types of rājāvarta (gulikā and cūrṇa; 7.85–87) may be peculiar to the *Rasārṇava*. Kaṅkuṣṭha is very briefly characterized as having the colour of coral and possessing a sattva (7.88).

The metals are called loha; the term dhātu is not used in the *Rasārṇava*. The series of metals is noteworthy by its mention of tīkṣṇa, which is usually one of the three types of iron, the other two being kānta and muṇḍa. Kānta is dealt with separately (6.40–64), while muṇḍa is not described in the *Rasārṇava*. Gold and silver are sārālohas, tīkṣṇa and copper sādharmaṇālohas, tin and lead pūṭikālohas (7.96–98).

Gold is said to be of three varieties only and to be either red or yellow (7.99–100); its sixteen varṇas are not, as in other texts, restricted to divine types of gold (7.101). Silver is either white or black (7.103). Copper is red or black (7.105); the two varieties called nepāla and kṣuraka are not mentioned. Three varieties of tīkṣṇa are enumerated (rohaṇa, vājara, capalālaya; 7.107), whereas many texts have more varieties; the verse listing these varieties adds that kāntāloha is a synonym of tīkṣṇa, which disagrees with the description of kānta in chapter six. Tin is described as white or black (7.110), while most treatises distinguish a kṣura and miśra type.

Chapter eleven tells a story about Ruru,⁸⁴ one of the Dānavas,⁸⁵ who took a small amount of mercurial bhasman, which enabled him to root up the world and destroy Kailāsa; Śiva conquered this malevolent being after taking a particular, very potent, mercurial preparation (11.158–161).

Four differently coloured varieties of mercurial bhasman are mentioned: black, white, yellow and blue (11.205).⁸⁶

Some of the divyauśadhis mentioned in chapter twelve are described: caṭulaparṇī (12.97), ṭṛṇajyotis (12.109), uccaṭī (12.112–114), sthālapadmiṇī (12.123–124), jyotiśmatī (12.144), dagdhārohā (12.149–151), and kṣīrakanda (12.166–168).

Chapter twelve also deals with the mythical origin and properties of a wonderful

substance called kartāṭrasa (12.202–210).

The sarṇjīvanijāla, which made the dead Daityas return to life, is said to be found near a village called Ambikā,⁸⁷ situated not far from the mountain Kṛṣṇagiri,⁸⁸ to the south of Kadalinagara, a city located on the right bank of the Godāvarī (12.236–239).

Uṣṇodaka is found in the Uṣṇodakakuṇḍa, near a temple dedicated to Kampeśvara, lying on the river Prañitā,⁸⁹ in the vicinity of the city called Kampa, located in its turn to the north of Mātāpura, a temple on the mountain Sahyādri, north of the Godāvarī (12.260–262).

Geographical names occurring in the verses on śailodaka are: Adhāreśa, Bhadrāṅga, Bhagavatī,⁹⁰ Brahmagiri,⁹¹ Brahmeśvara, Dhāreśvara, Durjadeśa, Gokarṇa,⁹² Gokulanagara,⁹³ Kiskindhyā,⁹⁴ Kṣīrakṣetra, Mālyavant,⁹⁵ Pampā,⁹⁶ Paryāṅka, Sahya,⁹⁷ Simhadvīpa, Śrīśaila,⁹⁸ Śrīvāna, Tristhala, Varṣāpurī, Vindhya, and Vyāghrapurī⁹⁹ (12.282–287).

Chapter fourteen refers to a number of twenty-four Siddhas (14.40).

Chapter seventeen, devoted to vedha, does not regard this process as a separate saṃskāra.¹⁰⁰

Several groups of drugs are listed in chapter five.

The niyāmaka drugs are: ākḥuparṇī,¹⁰¹ āmalakī, anantā, balā, bhṛṅgarāja, brahmadāṇḍī,¹⁰² cakramarda, dvīparṇī, ekaparṇikā,¹⁰³ ghanadhvani,¹⁰⁴ girikarṇikā, gojihvā, jalabindujā,¹⁰⁵ jvālīnī,¹⁰⁶ kākajāṅghā, kākamācī, kañcukī, kapotikā, kokilakṣa, kṣṇā, kṣṇaparṇī,¹⁰⁷ kṣīrīnī, kukkuṭī,¹⁰⁸ kuruṅgiṇī,¹⁰⁹ mahābalā, maṇḍūkaparṇī, matsyākṣī, meṣaśṛṅgī, nāgabālā, nīlī, padmacāriṇī, pāthā, phanijihvā,¹¹⁰ punamavā, rāsnā, sahararā, sahādevī, śarapunkhā, sarpākṣī, śatāvarī, śikhaṇḍīnī,¹¹¹ śvetā,¹¹² tittīḍī, triparṇī,¹¹³ tulasi,¹¹⁴ vahnīkarkoṭī,¹¹⁴ and viṣṇukrāntā (5.2–7).

The rasanirjīvakārikā drugs¹¹⁵ are: agnidhamanī, ajamārī, aṅganāmikā, bāla-mocakā,¹¹⁶ brahmācāriṇī,¹¹⁷ bṛhaṭī, cakrī,¹¹⁸ caṇḍālī,¹¹⁹ ekavīrā,¹²⁰ gajakarṇikā,¹²¹ gajārī,¹²² haṃsāṅghrī, hanūmatī,¹²³ hemapuṣpī, himāvātī, kākamācī, kākamuṇḍī,¹²⁴ kālīkā, kāñcanī,¹²⁵ kañcukī, keśinī,¹²⁶ khadgārī,¹²⁷ koṭārākṣī,¹²⁸ kuhukamvikā,¹²⁹ kumārī, lakṣmī,¹³⁰ lāṅgalī, mānīkandā,¹³¹ meṣaśṛṅgikā, modā,¹³² narajīvā,¹³³ narakasā,¹³⁴ nīlacitraka, rājīkā, rākṣasī, raktacitraka, raktasnuhī, raktaśṛṅgī,¹³⁵ raktikā, rudantī, śākhotakā, śamī, śāṅkhapuṣpī, somalatā, śṛgālajihvā, sūryabhaktā, tāmbūlī, toyavālī,¹³⁶ uccaṭā, vajrī, vanarājī,¹³⁷ vyāghranakhī, and vyāghrī (5.8–13).¹³⁸

The drugs that are helpful in the killing (māraṇa) of mercury are: bākuṭī, bilva, brahmabīja, dantīnī, devadālī, gojihvā, gosandhī, indravāruṇī, kākajāṅghā, kañcukī, kāravallikā, karkoṭī, karpāsa, kaṭutumbī, kṣṇajīraka, kṣṇakanaka,¹³⁹ mahākālī,¹⁴⁰ paṭolī, pipiluka, śambarī,¹⁴¹ sitāṅkola, śvetaguṇjā, śvetārka, and yavaciñcā (5.14–16).

Drugs used in the bandha of mercury are: arkapatṛī, brahmadāṇḍī, cakrāṅkī, cakrikā, dagdharuhā, devadālī, hanūmatī, hemavallārī, indurī,¹⁴² īśvarī, kākamācī, kṣṇamārjārī, kṣīrakukkuṭī, modinī,¹⁴³ nāgajihvā,¹⁴⁴ nāgakarṇī,¹⁴⁵ nīlajyotis, raktacitraka, raktasnuhī, śākhotakī, śāṅkhapuṣpī, somalatā, rudantī, sthālapadmiṇī, tāmrāparṇī,¹⁴⁶ tridāṇḍī, trīśūlī, ṭṛṇajyotis, utkaṭā, vaṃśapatṛī, vartulaparṇikā, vīrā, and vṛddhadārūka (5.17–21).

The drāvīkā group¹⁴⁷ consists of devadālī, kadālī, kākamācī, koṣātakī, śigruka, sūryāvarta, udakakaṇā,¹⁴⁸ vajrakanda, and vandhyā (5.22–23).

The krāmikā drugs¹⁴⁹ consist of arjunī, arkapattikā, brahmī, cavī, ghanarava, haṃsapādī, kākamācī, kāravella, kāsamarda, kṛtāñjali, kṣīranālī, kuravakā, lakṣmaṇā, nāginī, śatāvārī, satīrī, tāmūlī, varāhakarnī,¹⁵⁰ and vyāghrī (5.24–25).¹⁵¹

Brahmaṇḍa,¹⁵² sudaṇḍa¹⁵³ and lohadaṇḍa are useful for rasāyana purposes, because they are of the nature of Brahmā, Viṣṇu and Maheśvara (5.26). Bhṛngarāj, bhūpātālī, hemaparṇī, kaumārī,¹⁵⁴ nāgavallī, paṭolī, siṃhavallī, and śūkarī are the eight plants called mūlikā (5.27). The pañcaratna group, employed in the purification of mercury and in jaraṇa, consists of indirā, kaṅkālakhecārī, kṣamāpālī, mantrasiddhāsana, and niśācarī (5.28).

Noteworthy names of plants, apart from those already mentioned, are: ahimāra (8.77; 14.141),¹⁵⁵ amṛtākanda (6.98), āraktavallī (8.43; 15.2), bhiṇḍī (6.12), bhiṇḍī (6.102),¹⁵⁶ bhūmyāmalaka (15.9), bījā (6.98),¹⁵⁷ brahmasomā (17.10),¹⁵⁸ bṛhaṭṭraya (6.35), cakrāṅkā (15.138; 16.17), challī (14.98), dvipadī (12.8, 37, 39; 14.38; 15.2, 72, 75, 187, 190; 16.96; 17.9),¹⁵⁹ dvyārdra (7.21), gadā (11.24),¹⁶⁰ gaurīphala (7.113), gokarṇa (10.50),¹⁶¹ gopālakī (7.109),¹⁶² gorambhā (15.136), gr̥dhraṅkarṇī (17.10), hilamucā (11.25), kākāṇḍī (6.39; 15.148),¹⁶³ kākēṣṭha (18.6), kākīnī (6.24),¹⁶⁴ kāma (8.83),¹⁶⁵ kandapadminī (14.168), kaṇḍūlasūraṇa (6.105),¹⁶⁶ kāntā (10.39),¹⁶⁷ kapālī (6.26),¹⁶⁸ karaka (15.182),¹⁶⁹ karṇākhyā (8.36),¹⁷⁰ kauberī (11.25), kīlāla (6.81),¹⁷¹ kīṭamārī (12.42),¹⁷² kokilā (15.148, 175, 182),¹⁷³ kulīśa (6.30),¹⁷⁴ kumudī (15.2),¹⁷⁵ māghakhecārī (12.53), mahāsomā (15.138), mārjārāpādī (6.27),¹⁷⁶ mārjārī (16.10),¹⁷⁷ nāgakanyā (8.77),¹⁷⁸ nāgaśuṇḍī (11.44),¹⁷⁹ nārī (7.139; 13.17),¹⁸⁰ peṭārī (6.91, 99), rāgiṇī (11.86),¹⁸¹ rasāṅkuśa (10.52), rasaphala (12.364), śakraiatā (16.89),¹⁸² śalyā (15.45), śaṃkara (15.198), śivā (9.16; 16.89),¹⁸³ sthalakumbhī (6.118), śūkakanda (12.106), sumukha (6.13), suvarṇā (17.74),¹⁸⁴ tamā (15.153),¹⁸⁵ tiktasāka (11.26),¹⁸⁶ timira (6.98; 14.150),¹⁸⁷ varṇikādvaya (11.178),¹⁸⁸ vasuhatṭa (11.86; 15.9),¹⁸⁹ vegā (6.30),¹⁹⁰ viśatṛṇa (12.229, 230), viśvāmītrakapāla (14.118),¹⁹¹ and vyāghrakanda (6.130).

Some interesting yantras referred to are: bhramarāyantra (15.46), cakrayantra (15.107), dīpayantra (14.129), krauñcapāda (12.107), medinīyantra (12.60), and padmayantra (11.194).

Beef (gomāṃsa) is an item required in a number of alchemical operations (6.32; 7.4 and 78).

Kapālī(n) and Kāpālīka are rather often employed terms,¹⁹² which may refer to the alchemist Kāpālīka or the sect of the Kāpālīkas.

The author

The author of the *Rasārṇava* is unknown. The work is sometimes ascribed to Śambhu¹⁹³ or Bhairavānandayoginī.¹⁹⁴ It is possible that later texts refer to the author as Manthānabhairava.¹⁹⁵

Date

The period of composition of the *Rasārṇava* cannot be established with any certainty, but the work is earlier than the middle of the fourteenth century, because it is quoted in the *Sarvadarśanasamgraha*. Most scholars place it, in imitation of P.C. Rāy,¹⁹⁶ in the twelfth century.¹⁹⁷ P.C. Rāy¹⁹⁸ claimed that the *Rasārṇava* borrowed copiously from

Nāgārjuna's *Rasaratnākara*, i.e., the *Rasendramāṅgala*; G.P. Srivastava¹⁹⁹ asserted that it borrowed from the *Rasaḥṛdaya*. D.G. White²⁰⁰ noticed that the early eleventh-century *Vimalaprabhā* commentary on the *Kālacakratānta* reveals a number of striking similarities in both language and subject matter with the material found in the *Rasārṇava*.

P. Ray²⁰¹ regards the *Devīsāstra*, mentioned in a number of treatises, as identical with the *Rasārṇava*.

The *Rasārṇavakalpa*

The *Rasārṇavakalpa*²⁰² is a treatise on alchemy that forms part of the *Rudrayāmala* *tantra*.²⁰³ The work, in the form of a dialogue between Bhairava and Pārvaṭī, is written in verse, with the exception of two passages in prose (368–370; 651), and consists of 814 stanzas. A division into chapters is absent, but the text can broadly be divided into three parts: (1) 1–77: rasāyana preparations; (2) 78–207: alchemical operations; (3) 213–814: kalpas.²⁰⁴

Contents²⁰⁵

Part one describes several rasāyana preparations, all of them containing mercury or one of its compounds.

Part two describes several methods of making artificial gold;²⁰⁶ a number of saṃskāras of mercury are referred to; the medicinal qualities of some preparations are mentioned; some substances are used for rasāyana purposes, to obtain dehasiddhi, or to revive the dead. Part two is also concerned with the alchemical uses of a number of plants; the groups of verses on these plants resemble kalpas; some of the plants are described: vartulaparṇī (152), jyotiṣmatī (173), and dagdhārohā (177–180); the sixty-four divyaśadhis are referred to (135); kulauśadhis and tṛṇauśadhis are distinguished; the tṛṇauśadhis are, in contrast with the kulauśadhis, useless for alchemical purposes (133cd–137).

Part three consists of thirty-one kalpas, describing the origin of particular substances, their names, characteristics, properties and uses.²⁰⁷ Twenty-two kalpas are concerned with plants, three with inorganic substances (various substances, gandhaka, tālaka), and six with types of soil and water.²⁰⁸

The kalpas are devoted to: aparājītā (213–229),²⁰⁹ brahmaṇḍāṇī (230–241),²¹⁰ aśvagandhā (242–250),²¹¹ muṣālī (251–256),²¹² a number of inorganic substances (257–260: śrikhalākalpa), jyotiṣmatī (261–301),²¹³ śvetārka (302–322),²¹⁴ gandhaka (323–376),²¹⁵ tālaka (377–406), raktavajrī (407–414), uccatā (415–437),²¹⁶ kuṣmāṇḍī (438–448), īśvarī (449–491),²¹⁷ tṛṇajyotiṣ (492–500),²¹⁸ vīrā (501–516), devadālī (517–545),²¹⁹ pītadevadālī (546–564), kaṭutumbī (565–578),²²⁰ kṣīrakañcukī (579–590),²²¹ rudravatī (591–603),²²² somarājī (604–611),²²³ dakṣiṇadeśatāmravarṇa (mṛttikā) (612–617), mayūragira(rasa) (618–650), nāgamaṇḍala(rasa, -kardama, etc.) (651–701),²²⁴ candrodaka (702–729),²²⁵ viśodaka (730–745),²²⁶ śailodaka (746–756),²²⁷ kolakavṛkṣa (757–764), śālmālī (765–782),²²⁸ śrīvṛkṣa (738–789), and eraṇḍa (790–814).²²⁹

Sources are not referred to. An ancient authority mentioned is Nārada (215).²³⁰

Part two of the *Rasārṇavakalpa* is closely related to *Rasārṇava* 12.8–182. The candrodaka-, viṣodaka- and śailodakakalpas also find counterparts in the *Rasārṇava*.²³¹ Noteworthy agreements exist between verses of part three of the *Rasārṇavakalpa* and verses of the *Kākacapaḍīśvarakalpatantra*.²³²

Special features

Interesting plant names found in parts one and two are:²³³ ajanāyikā (97),²³⁴ anāmikā (66), arkanamitā (66),²³⁵ arkavallī (61),²³⁶ bahulā (64),²³⁷ bhṛṅga (57),²³⁸ dagdhārohā (177–181),²³⁹ dvipadī (105; 106),²⁴⁰ ekavīrā (153), gajadhvajī (66),²⁴¹ gajāri (148),²⁴² haṃsagamanī (66),²⁴³ haṃsāṅghri (162),²⁴⁴ harīndarī (130),²⁴⁵ jaṭādhara (67),²⁴⁶ kaṅkālakhecārī (115–116; 118), khecarī (122; 123),²⁴⁷ koravallī (148),²⁴⁸ kṛṣṇanāla (181),²⁴⁹ kṣīrakanda (193),²⁵⁰ kṣmāpāla (143), lajjakā (66),²⁵¹ mantrasimphāsana (122; 123), niśācara (78; 80; 81; 84; 87; 90; 92; 96; 145),²⁵² payovallī (59),²⁵³ puṣpī (6; 123),²⁵⁴ raktakañcukī (154),²⁵⁵ śambhu (61),²⁵⁶ simhatuṇḍa (109),²⁵⁷ śukacañcu (162),²⁵⁸ suśīrakī (61),²⁵⁹ trṇajyotis (163cd–165),²⁶⁰ vajrakanda (156),²⁶¹ vartulaparṇī (152), vellakāra (61),²⁶² and vṛścikā (155).²⁶³

The *Rasārṇavakalpa* contains a large number of geographical names. Regions mentioned are: Cyavana (613), Joṅgala (502), Kaṅkaṇaka (438), Nāgamaṇḍala (615; 654; 657; 667; 669), Pāṇḍava (613), and Pāriyātra (651). Cities and other places referred to are: Deūliyā (752), Karahāta (618),²⁶⁴ Tīllāpada (612), and Ujjayinī (180). Names of rivers are: Bhagavatī (750),²⁶⁵ Candrabhāgā (653; 668; 680),²⁶⁶ Gaṅgā (180; 653; 668), Kulā (670), Narmadā (653; 693; 695), Pāra (651), Pārā (669),²⁶⁷ Sarasvatī (653; 669),²⁶⁸ and Śoṇa (672).²⁶⁹ Names of mountains are: Amarakāṇṭaka (703),²⁷⁰ Bhadra (= Meru; 751), Brahmagiri (751),²⁷¹ Candrakānta (429), Gandhaparvata (= Gandhamādana; 703),²⁷² Gokarṇa (750),²⁷³ Hariścandra (703), Hemaprastha (429), Himālaya (428), Himavant (704), Jālandhara (428),²⁷⁴ Kapila (665; 666), Kardama (747), Karvura (654; 667; 668; 669; 680), Kumeru (427), Mahendra (503; 703),²⁷⁵ Malaya (502; 703), Mayūragira (618),²⁷⁶ Nṛsiṃha (752), Paryāṇka (749), Piṅgala (654; 668; 677; 699–701), Rkṣa (751),²⁷⁷ Sahya (752),²⁷⁸ Śrīśaila (703; 749),²⁷⁹ Sunanda (654; 667), Trikūṭa (704),²⁸⁰ Vindhya (428; 502; 751), and Vyāghra (667; 668).

These geographical names are regarded as indications that the *Rasārṇavakalpa* has been composed in the Vindhya region. This hypothesis is thought to be supported by the consideration that the *Rudrayāmalatantra* came into being in the Viṣṇukrāntā area, which extended from the Vindhyas to Chāṭṭala (i.e., Chittagong).²⁸¹

Date

Parts of the *Rasārṇavakalpa* are closely related to parts of chapter twelve of the *Rasārṇava*. Mira Roy and B.V. Subbarayappa expressed as their opinion that the *Rasārṇava* is posterior to the *Rasārṇavakalpa*, without claiming that the former borrowed from the latter, since indebtedness to a common source cannot be brushed aside easily. B.V. Subbarayappa is convinced that the *Rasārṇavakalpa*, on account of its emphasis on Tantric practices and its esoteric approach to alchemical procedures, dates from the be-

ginning of the flourishing period of Indian alchemy, i.e., in his estimate, the period A.D. 900–1100. He assigns the *Rasārṇava* to the twelfth, the *Rasārṇavakalpa* to the eleventh century. The terminus post quem is in his view the date of the *Rasaratnākara* (i.e., in his opinion, the eighth or ninth century), because one of the verses of this work forms part of the *Rasārṇavakalpa*;²⁸² this argument can be disregarded, because the pertinent verse is not from the *Rasaratnākara*, but from the *Rasendramaṅgala*.

It seems hazardous to assume that an unsystematic text of a compilatory character like the *Rasārṇavakalpa* may be dated rather accurately. The chronological position of the *Rudrayāmala*, to which it is said to belong, and the different versions of that text should therefore carefully be taken into consideration.

Chapter 11 *Rasasaṃketakalikā to Rasendracūḍāmaṇi*

The *Rasasaṃketakalikā*

The *Rasasaṃketakalikā* by Kāyastha Cāmuṇḍa¹ is a treatise on alchemy and iatro-chemistry in 399 verses,² arranged in four chapters (ullāsa).

Contents³

The maṅgala is addressed to Śiva as the lord of mercury (Raseśa). Chapter one (49 verses) describes the mythical origin of mercury (1.2–4ab),⁴ the varieties of mercury (1.4cd–5ab), the doṣas and kañcukas (1.5cd–6), some saṃskāras (mardana, svedana, murchana, pātana, gandhakajāraṇa, bandha, māraṇa; 1.7–40), the properties of killed mercury (mṛtarasa) (1.41–46), the side effects of the use of mṛtarasa and their treatment (1.47–48), and the results of paying homage to the lord of mercury (1.49). Chapter two (65 verses) is concerned with the description of the six natural metals (loha), their properties, varieties, purification and killing (2.1–49), lohakiṭṭa (2.50–51), kharpara (= rasaka; 2.52–53), the purification and killing of some alloys (kāmsya and pittala; 2.54ab), the treatment of disorders caused by the metals (2.54cd), and the nirutthakaraṇa⁵ of the metals (2.55–57); the chapter ends with the description of abhraka, its varieties, killing, the extraction of its essence (sattvapātana), the killing of the essence,⁶ and the uses of the products obtained (2.58–65). Chapter three (16 verses) deals with viṣas⁷ and upaviṣas (3.1–9), opium (3.10–12), and bhṛṅgi (3.13–16). Chapter four (129 verses) is a collection of rasayogas to be employed against various diseases and for rasāyana and vājīkaraṇa purposes. Chapter five (40 verses) contains formulae for pills (guṭikā; 5.1–30) and some other preparations (5.31–40).⁸

Sources are not referred to. Cāmuṇḍa mentions the saṃpradāya of his guru (4.85 and 91).

The *Rasasaṃketalikā* is quoted in the paribhāṣā pariśiṣṭa of the *Ānandakanda*, the *Āyurvedābhdhisāra*, Caturbhujamiśra's commentary on the *Rasahrdaya*, Khare's commentary on the *Rasaratnasamuccaya*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, the *Rasakāmadhenu*, the *Rasamitra*, the *Rasāmṛta* of Yādavjī Trikaṃjī, the *Rasāyanasamgraha*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*. It is one of the sources of the *Āyurvedaprakāśa*, *Bheṣajasaṃhitā*, *Pāradasaṃhitā*, and *Rasayogasāgara*.

A commentary on the *Rasasaṃketakalikā* by Somadevaśarman is recorded.⁹

Special features

Four varieties of mercury are distinguished, named after the four varṇas (brāhmaṇa, kṣatriya, vaiśya, śūdra; 1.4cd). Five naisargikadoṣas and seven kañcukas are mentioned; their names are not enumerated (1.5cd–6). Eighteen saṃskāras are referred to, but only a few, which are easily carried out, are described (1.7). Four types of rasabandha are mentioned: pāṭa¹⁰ or parpaṭikābandha, khoṭa or piṣṭibandha, jalaukā or pakvabandha, and bhasmākhyā (1.16–17). The preparation of two varieties of rasabhasman, ūrdhvaga- and talabhasman (1.18–28ab),¹¹ is described, as well as the preparation of five varieties which differ in colour: rakta, pīta, kṛṣṇa, nīla, and pāṇḍurāruṇa (1.28cd–33).¹² The six natural metals are gold, silver, copper (arka), tin, lead and iron (2.1); bronze (ghoṣa or kāmsya) and brass (āvartaka or pittala) are alloys (2.1). Five varieties of gold are distinguished (prākṛta, sahaja, agniya, khanija and rasavādottha; 2.4–5), three varieties of silver (sahaja, khanija, kṛtrima; 2.10), two varieties of copper (nepāla and mleccha; 2.14) and of tin (khuraka and miśraka; 2.25). Three types of iron are mentioned: muṇḍa, tīkṣṇa and kānta; muṇḍa has three varieties (mṛdu, kuṇṭha, kāṇḍāra), tīkṣṇa six (kharasāra, hotṛāsa, tārāvarta, biḍa, kālaloḥa, gajākhyā), and kānta four (romaka, bhrāmaka, cumbaka, drāvaka) (2.34–37). Zinc is not mentioned as one of the metals, but kharparasattva is described (2.52–53).¹³

Four varieties of mica (abhraka) are distinguished (pīta, sita, asita, and rakta, called respectively pināka, dardura, nāga, and vajra; 2.58–59). A nīlakaṇṭhamantra accompanies the killing of poisons (3.3–4ab). Upaviṣas mentioned are vajra, arka, heman, halinī, hayāri and viṣamuṣṭikā (3.9).¹⁴ Four varieties of bhṛṅgi¹⁵ are distinguished; their flowers are white, red, yellow and dark (kṛṣṇa) (3.13–15).

The rasas of chapter four are not arranged according to a particular scheme. One of the formulae is also found in Cāmuṇḍa's *Jvaratimirabhāskara*.¹⁶ Divine or human authorities to whom rasayogas are attributed are: Bhairavānanda,¹⁷ Brahmā,¹⁸ Nāgārjuna,¹⁹ and Rudra.²⁰ One formula²¹ is said to have been of profit to Ghaṭaśravas,²² Kumbhayoni,²³ Vṛkodara,²⁴ Śanaīścara,²⁵ Sahasradīṣ,²⁶ Pañcamukha,²⁷ and Caturmukha.²⁸

Some of the rasayogas may be original contributions of Cāmuṇḍa, because they are not found in earlier works.²⁹

Noteworthy items of the materia medica are: ākalla(ka) (4.129; 5.12), jambhala (2.61), jhaṣanayana (2.61), malapū (1.38),³⁰ phaṭakī (1.40),³¹ phitkarī (4.83 and 127),³² and sora (4.83).³³

Śaṅkhadrāva was known to Cāmuṇḍa (4.38–89).

The *Rasasāra*

The *Rasasāra* by Govindācārya³⁴ is a treatise almost entirely devoted to alchemy.

Contents³⁵

The work consists of 940 verses, arranged in twenty-six chapters (paṭala).

Chapter one (rasapūjāsvarūpastuti; 21 verses) is in praise of mercury and contains a number of mantras.³⁶ Chapter two (dravyasamgraha; 19 verses) enumerates the

items of an alchemist's equipment. Chapter three (anukramanikā; 17 verses) lists twice twenty-four saṃskāras. Chapter four (aṣṭacatvāriṃśatsaṃskāra; 13 verses) is about the doṣas of mercury, its purification, and the effects of a number of saṃskāras. Chapter five (rasaśodhanasaṃskāra; 69 verses) describes the details of śodhana (1–12), svedana (13–15), mardana (16), mūrchana (17–21), uthāpana (22–25ab), pātana (25cd–36ab), bodhana (36cd–50ab), niyamana (50cd–56ab), and nirodhana (56cd–69) of mercury. Chapter six (rasaloḥasuddhisattvapātana; 39 verses) deals with the purification of the rasas and uparasas and the extraction (pātana) of their essences, the extraction of the essences of bhūnāga,³⁷ kānta (13–15ab), caura, hiṅgula, śilā, kāñkṣī, kāsīsa and tālaka (15cd–33), as well as with the purification of sulphur (34–39). Chapter seven (sattvasthīrīkaraṇa; 14 verses and ½ half) is about processes which make the sattvas, after their extraction, stable (sthira). Chapter eight (drutipātanānāguṇanirūpaṇa; 59 verses and a half) is concerned with the liquefaction (druti) of the sattvas of the rasas and uparasas, the druti of the lohas, ratnas, etc.; some groups of substances are also dealt with: tailavarga (32cd–34),³⁸ vasāvarga (35–36ab),³⁹ raktavarga (37–41), amlavarga (44cd–47ab), auśadhīkṣāragāṇa (48–51), biḍas (52cd–58). Chapter nine (kṣāradrāvabhidapādivyauśadha; 28 verses) gives an account of rangākṣṛī or raṅgadruṭi, an art the author learnt from Tibetan Buddhists, followed by the preparation of a biḍa and the enumeration of herbs which are useful in the jāraṇa, māraṇa and bandhana of mercury. Chapter ten (ratnalakṣaṇadrāvānabhedanamelāpāka; 50 verses and ½ half) describes the ratnas and their varieties, their drāvāṇa (= druti), māraṇa (or bhedana), and melana (mixing). Chapter eleven (bījapāka; 57 verses) describes a number of bījas, which are helpful in the process called jāraṇa, and the pāka of the bījas. Chapter twelve (mahārasajāraṇādividhi; 95 verses) is concerned with cāraṇa, garbhadruti, jāraṇa of a grāsa added to mercury, ratnadrutimela, rañjana, bandhana (mūṣābandha), sāraṇa, pratisāraṇa, krāmaṇa, and vedha (also called praveśa). Chapter thirteen (vedhādīkrama; 27 verses) describes several types of vedha; udghāṭana is also dealt with (22–26ab). Chapter fourteen (dvandvamārapīṣṭistambhananigaḍabandhanasaṃkalikāyogadrutikarmādinirūpaṇa; 35 verses) gives an account of dvandvamela (mixing two substances) and dvandvamāra (killing of this mixture) (2–8), piṣṭistambhana (9–17ab), nigaḍabandhana (17cd–20), saṃkalī (21–33) and druti (34–35). Chapter fifteen (rasoparasalohakarman; 34 verses and a half) describes operations leading to transmutation (vedha), in which several sattvas of rasas and uparasas, such as those of vaikrānta of various colours and of vimala, are important. Chapter sixteen (ratnaprayoga; 22 verses) is about the uses of ratnas, their kalkas (pastes), etc., as bījas in the making of gold and silver. Chapter seventeen (anekakalkabhedha; 45 verses) describes the kalkabandhana of mercury; the poisonous substances are enumerated; methods to achieve auri- and argentification by means of poisonous substances are dealt with. Chapter eighteen (maṇimūṣākarmadala; 24 verses) is about the uses of gems (maṇi) and the transmutation of metals. Chapter nineteen (guṭīkākathana; 12 verses and a half) is devoted to the preparation of two varieties of guṭīkā, called kāmādhenu, which convert base metals into gold and make one obtain a divine and invulnerable body. Chapter twenty (anekaguṭīkādināṃ sādhanopāyaḥ; 47 verses) describes several guṭīkās which confer longevity, the ability

to fly (khecaratva), invisibility, invulnerability, etc.; even the dead may be resuscitated by means of these pills. Chapter twenty-one (krauñcayogapakṣakarmādivyauśadhi; 68 verses and a half) is concerned with the uses of animal products (krauñcayoga; 1–8ab) in alchemical operations and with divine herbs (divyauśadhi; 8cd–59) and their uses. Chapter twenty-two (yantramūṣā; 20 verses and a half) describes yantras and other implements used in an alchemical workshop. Chapter twenty-three (mahārasasevana; 31 verses) is about rituals to be performed before using mercurial products that lead to dehasiddhi. Chapter twenty-four (rasāyanakathana; 16 verses) describes rasas which may be used for curing diseases and for rasāyana purposes. Chapter twenty-five (dhātumāraṇaprayoga; 28 verses) is concerned with the killing of metals and essences (sattva). Chapter twenty-six (mahārasasevā; 46 verses) is about the consumption of mercurial preparations and the wonderful effects obtained.

The *Rasasāra* is quoted in the prakīrṇaka pariśiṣṭa of the *Ānandakanda*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's and Khare's commentaries on the *Rasaratnasamuccaya*, the *Pāradasaṃhitā*, *Rasajalanidhi*,⁴⁰ *Rasakāmādhenu*, *Rasamitra*, *Rasāyanasaṃgraha*, *Ratnākaraśādhayogagrantha*, *Rasatatvavivecana*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, and Ṭoḍara's *Āyurvedasaṃkhyā*.⁴¹ The work is one of the sources of Hariprapanna's *Rasayoga-sāgara*, Hariśaraṇānanda's *Kūpīpakvarasanirmāṇavijñāna*, and Yādavjī Trikamjī's *Rasāmṛta*.

Govindabhiṣku is quoted in Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa* and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Special features

The pūjā of mercury (rasarāja) should be performed by the alchemist in the company of a female associate (1.8–11). Chapter two lists eight dhātus: gold, silver, copper, iron, tin, lead, rīṭikā (brass), and kāṃsyaka (bronze) (2.4),⁴² and nine gems: vajra, muktāphala, padmarāga, nīlaka, marakta,⁴³ puṣparāga, medas,⁴⁴ vaidūrya, and vidrūma (2.5).⁴⁵ Some implements used in the laboratory are: piṇḍikā (2.8; 22.18),⁴⁶ kaṇḍanī (2.8),⁴⁷ retanī (2.9; 22.15),⁴⁸ hatoḍī (2.9),⁴⁹ kaṇī (2.9; 22.15),⁵⁰ chinī (2.9),⁵¹ arhiṇī (2.9; 22.16),⁵² ghana (2.9),⁵³ saṃdamśanī or saṃdamśinī (2.9; 22.14),⁵⁴ and dīrghasaṃdamśaka (12.14).⁵⁵

The unusual series of forty-eight saṃskāras of chapter three consists of: (1) rasoparasasuddhi, (2) loḥasuddhi, (3) sattvadhrāvāṇa, (4) sattvasthīrīkaraṇa, (5) drutipāta, (6) rangākṣṛī, (7) ratnalakṣaṇa, (8) ratnadhrāvāṇa, (9) dhātusodhana, (10) ratnamelāpana, (11) bījapāka, (12) garbhadruti, (13) jāraṇa, (14) drutimelāpana, (15) rañjana, (16) bandhana, (17) sāraṇa, (18) māraṇa, (19) pratisāraṇa, (20) krāmaṇa, (21) vedha, (22) udghāṭana, (23) vikraya, (24) piṣṭistambhana, (25) bandha and nigaḍabandha, (26) saṃkalīkaraṇa, (27) rasoparasalohakarman, (28) ratnaśodhana, (29) vaṅgadoṣavināśa, (30) kālikāvijaya, (31) kalkabhedāḥ, (32) viśakarman, (33) maṇimūṣāśrayakarman, (34) dalādīkaraṇa, (35) kāmādhenuḥguṭīkāḥ, (36) vayaḥstambha, (37) khecarī, (38) divyaguṭīkāḥ, (39) krauñcayogaḥ and pakṣīkarman, (40) auśadhīkalpa, (41) yantrabhedāḥ, (42) mūṣābandhāḥ, (43) āyudhāni, (44) rasarājāsvedana, (45) dhātumāraṇa, (46) dehasaṃkrāmaṇa, (47) bhojana, and (48) caryā.⁵⁶

The series of eight *saṃskāras* described in chapter five, though more in line with what is usually found in *rasasāstra* texts, presents some uncommon features: *śodhana* is the first *saṃskāra*; *dīpana* is absent; *bodhana* and *nirodhana* are two distinct *saṃskāras*. The verses on *pātana* give an account of *ūrdhvapātana* only. A number of *doṣas* and *kañcukas* of mercury are referred to in chapter four: *bhūmidoṣa*, *darpa(doṣa)*, *kālikā*, *kāpālī*, *maladoṣa*, *nāgadoṣa*, *ṣaṇḍadoṣa*, *sūkṣmadoṣa*, *unmatta*, *vaṅgadoṣa*, *viṣa*, and *aśmakañcuka*. A number of *saṃskāras* have to be continued for a period of twenty-one days (5.13–15: *svedana*; 5.16: *mardana*; 5.22–25ab: *utthāpana*; 5.36cd–50ab: *bodhana*; 5.50cd–56ab: *niyamana*; 5.56cd–63: *nirodhana*).⁵⁷

The *uparasas* consist of *vaikrānta*, *sasyaka*, *tāpya* (= *mākṣika*), *kāca* (v.l. *kānta*),⁵⁸ *abhra*, *vimala*, *giri*,⁵⁹ *gairika*, *tutthaka*, and *rājāvarta* (6.8–9a).⁶⁰ The extraction of the essence of *bhūnāga* is said to be carried out in the same way as the extraction of the essences of the *uparasas* (6.13ab), but a different procedure is employed in the extraction of the essence of *kānta* (6.13cd–14). The substance usually called *rasaka* is referred to as *caura* in the *Rasasāra*;⁶¹ its essence is designated by the term *kharparikā* (6.17).⁶² The *sthirikaraṇa* or *sattvabandha* (7.10) of the essence of *caura* (= *rasaka*) is the model for this type of process, carried out by means of the *cakrayantra* or *cakrarāja*.

Chapter nine is concerned with the colouring of mercurial products (*raṅgākṛṣṭi*, *raṅgadṛāva*), the technique of which is described in detail. It opens with the declaration that *raṅgākṛṣṭi* will be described, a subject not dealt with elsewhere in alchemical literature. The author mentions that Buddhists living in Tibet (*Bhoṭadeśa*) are acquainted with this technique (9.2). The same chapter enumerates three series of eight plants to be employed in the *jāraṇa*, *bandhana* and *māraṇa* of mercury (9.24cd–28). These groups consist of: *agnidamanī*, *haṃsapādī*, *kumārī*, *lāṅgalī*, *mocā*, *siṃhī*, *vajrī*, and *vyāghrī* (9.24cd–25); *brahmadandī*, *mudgapatṛī*, *rudantī*, *śaṅkhī*, *tridaṇḍī*, *triśūlī*, *vajrī*, and *vānarī* (9.26–27ab);⁶³ *kākāhvā*, *kākamācī*, *kākatuṇḍī*, *kālāñjanī*, *kālikā*, *kañcukī*, *karkoṭī*, and *kaṭutumbī* (9.27cd–28).⁶⁴

Chapter ten mentions five defects (*doṣa*), five qualities (*guṇa*), and four colours (*chāyā*) of diamonds (*vajra*) (10.2–4). The usual eight origins of pearls (*muktāphala*) are enumerated (10.5–6ab). The other gems are of four types: *brāhmaṇa*, *ṣātriya*, *vaiśya* and *śūdra* (10.8); the *brāhmaṇa* types are used in making silver, the *ṣātriya* types in making gold (10.19); a specific method of killing is required for each of the four types (10.35–41).

Chapter eleven refers to *rā* and *rirī* as substances used in the preparation of *bījas*.⁶⁵

Chapter twelve describes *sāraṇa* and *pratisāraṇa*, but omits *anusāraṇa*. The verses on *mūṣābandha* refer to a series of products of this process, called *daṇḍadhārin*, *pāyasākṛṭī*, *jalaukākāra*, *avipluṣa*, *chedin*, *dadhivat*, and *navanītābha* (12.42–44ab).⁶⁶ The substances belonging to the *krāmaṇagaṇa* are enumerated: *madhūcchiṣṭa* (bees-wax), *madhuka*, *madhūka*, *ṭaṅkaṇa*, *sitā*, *aśvakaṇṇamala*, *guñjā*, *keśāḥ* (hairs), *chucchundarīvasā*,⁶⁷ *stūṭrajās*,⁶⁸ *stūṭrayas* (breastmilk), *śukra*, *indragopa*, *bhūlatā*, *vasā*, *tāla*, *śilā*, *gandha*, *sāriṇā*, *kṣīṇī*, *viṣa*, *hayārī*, *nābhī*, *karpūra*, *snuhī*, *arka*, *kṣīrakandaka*, *saṛja*, *mṛtanāga*, *guḍa*, *guggulu*, and *tutthaka* (12.85cd–88). The concluding verses of chapter twelve (12.89–94) are in praise of the miraculous effects of processed mercury, which transmutes the metals hidden in mountains, and makes the adept into a second Śaṃ-

kara.

Chapter thirteen enumerates the types of *vedha* (13.1–3).⁶⁹ The items of the group called *pañcamṛd* are enumerated: *khaṭikā*, *lavaṇa*, *gairī*, *kāṅkṣī*, and *iṣṭikacūṇaka*⁷⁰ (13.26cd–27ab). Chapter fourteen refers to an *agnīśomākhyayantra* (14.4).

Chapter seventeen mentions five types of *bandha* (*mṛtabandha*,⁷¹ *jīvabandha*, *khoṭa*, *pāta*, *jalaukā*; 17.5), five types of *avasthā* (*dhūma*, *ciṭciṭī*, *maṇḍūkapluti*, *kampa*, *atibhrama*; 17.7),⁷² and ten failures (*vikriyā*) of practice (17.11cd–13ab). The ten *vikriyās*, also called *ṣaṇḍhajātis*, are: *ksudhita*, *atinirāhāra*, *aśuddhalohajāraṇa*, *akrāmaṇa*, *atigrāsa*,⁷³ *biḍahīna*,⁷⁴ *biḍādhika*,⁷⁵ *śītatva*, *ativahnitva*, and *devatāvighna*. Eighteen poisonous substances are listed: *mayūra*, *kālakūṭa*, *saktuka*, *binduka*, *vatsanābha*, *sunābha*, *śaṅkhanābha*, *sunirmala*, *bhṛṅga*, *karkoṭaka*, *musta*, *puṣkara*, *śuklakandaka*, *raktaśṛṅga*, *haridra*, *cakra*, *hālāhala*, and *bhrāmara*;⁷⁶ these poisons are divided into four *brāhmaṇa*, four *ṣātriya*, four *vaiśya*, and six *śūdra* types (17.21cd–25ab), employed in making silver (the *brāhmaṇa* types) and gold (the *ṣātriya* and *vaiśya* types), and in curing diseases (the *śūdra* types) (17.25cd–26ab). Chapter seventeen also describes four varieties of *ahipheṇa*, a substance produced by poisonous marine fishes (17.36–38); according to another view, *ahipheṇa* is a kind of froth (*phena*) produced by a snake.⁷⁷

Chapter eighteen refers to three types of *maṇi*: *sūryakānta*, *candrakānta* and *tārakānta*.

Human flesh (*naramāṃsa*) is one of the substances required for the preparation of the *guṭikā* called *kāmadhenu* (19.3, 6, 8) and other pills (20.20). Particular animals or their organs are essential in the preparation of the pills described in chapter twenty.⁷⁸ Substances of animal origin are necessary for the *krauñcayogas* of chapter twenty-one.

Plants used in alchemical operations are classified as *ṛṇa*, *gulma*, *latā*, *vallī*, *vṛkṣa* and *atavisarpiṇī* (21.10). Sixty-four of these plants are described: *ajagarī*, *alpapatṛī*, *aśokanāmnī*, *āsuri*, *bhṛṅgā*, *bhūkadambā*, *bhūtakeśī*, *bilvātakī*, *brahmadandī*, *chattrī*, *devī*, *garuḍī*, *gomārī*, *gonasī*, *gorocanā*,⁷⁹ *gośṛṅgā*, *hemalatā*, *īśvarī*, *jalajā padminī*, *jātakī*, *jayā*, *kākapakṣā*, *kaṭutumbī*, *kṛṣṇacitraka* or *gopana*, *kīṭamārī*, *kṛṣṇavallī*, *kṣīralatā*, *kṣīṇī*, *laṣunī*, *mayūraśikhā*, *nāginī*, *palāśalatikā*, *payasvinī*, *pīṭakṣīrā*, *punnāgapatṛikā*, *rajanī*, *raktacitraka*, *raktakṣīrā*, *raktaparṇī*, *rohiṇī*, *rudantī*, *śalyā*, *sāmarī*, *śambarā*, *śambarī*, *saptaparṇī*, *siṃhikā*, *somadandī*, *somalatā*, *somavallī*, *śrīnāmnī*, *tridaṇḍī*, *trijaṭā*, *triśūlī*, *trivallī* or *raktamālā*, *tumbī*, *vajravallī*, *vajrī*, *vārāhī*, *vijayā*, *vīrā*, *viśalyā*, *vyāghrapādalatā*, and *vyāghrī* (21.11–59).⁸⁰

Some of the *rasas* of chapter twenty-four are *hemendra*-, *nāgendra*-, *tārendra*-, and *vaṅgendrarasa*.

Chapter twenty-six describes rules pertaining to diet and behaviour to be observed by the *sādhaka*. An important prerequisite for the attainment of *siddhi* is the prevention of impregnation during sexual intercourse; it is therefore recommended to make one's sexual partner infertile (26.12–14ab).

Some *yantras* mentioned in the *Rasasāra* are *cakrayantra* (5.25ab and 35; 6.29; 9.16; 14.3)⁸¹ or *cakrarāja* (12.23; 17.3 and 29; 22.3; 24.3 and 8), *jalakūrma* (12.25 and 37), *jalayantra*, and *sthalakūrma* (12.35 and 37).

Haṃsa is a term frequently employed to designate *hiṅgula* (6.32 and 33; 7.1, etc.).

Laddi is often used in the sense of laṇḍa, a firm animal excrement (7.5; 8.5, 6, 13; 10.30, etc.).

The author

The author mentions his name, Govinda or Govindācārya, several times in his treatise.⁸² He was a grandson of the brāhmaṇa Sahadeva of the Moḍha jñāti, an expert in all the sciences and a mantrasiddha, and a son of Surāditya. He describes himself as a Śiva worshipper and a pupil of Dhīradeva, a specialist in alchemy. Dhīradeva was a Śārasvata brāhmaṇa, born in the Antardvī country,⁸³ and a son of Abhayapāla.⁸⁴

A Kirāteśa, referred to in the introductory verses (1.13),⁸⁵ is probably a deity,⁸⁶ since he is mentioned together with the guardians of the quarters of the sky (dikpāla) and Bhairava.

A *Samnipātamañjarī* is sometimes ascribed to the author of the *Rasasāra*.⁸⁷

Govindācārya is quite distinct from Govindabhaḡavatpāda, the author of the *Rasahṛdaya*.

Date

The *Rasasāra* is usually assigned to the thirteenth,⁸⁸ fourteenth,⁸⁹ or fifteenth century.⁹⁰ The only evidence for its date consists of the quotations in Ṭoḍara's *Āyurvedasaṅkhyā*.

The Rasatarāṅgiṇī

The *Rasatarāṅgiṇī* by Sadānandaśarma⁹¹ is a systematic treatise on alchemy in the service of medicine.

Contents

The *Rasatarāṅgiṇī* consists of about 3,650 verses, arranged in twenty-four chapters (taraṅga). The subjects of the chapters are: (1) the laboratory (rasaśālā; 38 verses); (2) technical terms (paribhāṣā; 74 verses); (3) the mūṣās and puṭas (50 verses); (4) the yantras (62 verses); (5) the doṣas and kañcukas of mercury (5.7–13); the purification of mercury (5.14–37); the extraction of mercury from cinnabar (5.38–42); the eight saṁskāras: svedana, mardana, mūrchanā, utthāpana, pātana, bodhana, niyāmana, and dīpana (5.43–99); gandhakajārāṇa (5.100–108); (6) mūrchanā (6.2–8);⁹² the preparation of mugdharasa (6.9–19),⁹³ rasapuṣpa (6.20–58), sikthataila (6.59–64),⁹⁴ rasakarpūra⁹⁵ and rasakarpūradrava (6.65–106), kajjalī (6.107–134), rasaparpaṭī (6.135–161), rasasindūra (6.162–237),⁹⁶ makaradhvaja (6.238–248), and the yellow bhasman of mercury (6.249–255),⁹⁷ together with their medicinal uses; (7) the killing of mercury; the uses of mercurial ashes (mṛtasūta); kṣetrīkaraṇa; rules concerning the use of mercurial products for rasāyana purposes (111 verses); (8) sulphur (gandhaka), its purification, the medicinal uses of purified sulphur (8.1–65); ten gandhakakalpas (8.66–93); the preparation of gandhakataila (8.94–112) and gandhakadrāva (sulphuric acid; 8.113–123); (9) cinnabar (hiṅgula), its purification and uses (62 verses);⁹⁸ (10) mica (abhṛaka), its varieties, purification and killing; the amṛtikaraṇa of the bhasman⁹⁹ and its uses,¹⁰⁰ the extraction of the sattva of abhṛaka, its purification, killing and

uses (127 verses); (11) haritāla, its purification, killing¹⁰¹ and uses, the extraction of its sattva and the uses of this sattva (11.1–103); manāṣilā, its purification, uses and sattvapātana (11.104–129); śaṅkhavisa (= gaurīpāṣaṇaka, mallaka, somala), its purification and uses (11.130–176); the properties and uses of tuvaṛī (11.177–207),¹⁰² khaṭikā (11.208–214), cūrṇa¹⁰³ and cūrṇodaka (11.215–229), dugdhapāṣāṇa (11.230–236), and godanta (11.237–242);¹⁰⁴ (12) śaṅkha,¹⁰⁵ its purification and killing, the uses of śaṅkha and mṛtaśaṅkha (12.1–34); śaṅkhadrāvaka and its uses (12.35–56); the purification, killing and uses of kṣudraśaṅkha (12.57–63), śukti (12.64–78), jalaśukti (12.79–81), varāṭaka (12.82–102),¹⁰⁶ and śṛṅga (12.103–109);¹⁰⁷ the properties, uses and origin of samudraphena (12.110–126); (13) the preparation of three caustics (kṣāra): yavakṣāra (and nimbūkāmlīyayavakṣāra; 13.1–41), sarjikṣāra (and nimbūkāmlīyasarjika; 13.42–71) and taṅkaṇa (and taṅkaṇāmla; 13.72–122), their properties and uses; (14) other caustics: navasāra¹⁰⁸ (and its sattva; 14.1–26), soraka (and sorakadrāvaka; 14.27–58),¹⁰⁹ apāmārgakṣāra, arkakṣāra, tilakṣāra, snuṅkṣāra, palāśakṣāra, and ciṅcākṣāra (14.65–116); the salts: saindhava, nārikelalavaṇa, arkalavaṇa, sāmudra, viḍa, sauvarcala, and romaka (14.117–164); the preparation of lavaṇadrāvaka and its uses (14.165–184); (15) metals in general (15.1–7) and gold¹¹⁰ (suvarṇa; 15.8–116); (16) silver (rajata; 123 verses);¹¹¹ (17) copper (tāmra; 17.1–116),¹¹² the extraction of bhūnāgasattva and its māraṇa (17.117–122), the extraction of the essence of mayūrapiccha (the tail-feathers of a peacock; 17.123–124); (18) tin (vaṅga) and suvarṇavaṅga (105 verses);¹¹³ (19) lead (śīśaka; 19.1–93)¹¹⁴ and zinc (yaśada;¹¹⁵ 19.94–170), their purification, killing and uses; (20) iron (lauha), its varieties, their purification, killing and uses (20.1–122);¹¹⁶ maṇḍūra, its purification, killing¹¹⁷ and uses (20.123–140); (21) the upadhātus, their purification, killing and uses, their sattvas and the killing of the sattvas; the upadhātus consist of: mākṣika (21.1–70),¹¹⁸ tuttha (21.71–147),¹¹⁹ (giri)sindūra (21.148–164), mṛddāśaṅga (21.165–180), rasaka or kharpara (21.181–214),¹²⁰ kāntapāṣāṇa (21.215–226), and kāsisa (21.227–260);¹²¹ (22) the alloys (pittala and kāmśya), their purification, killing and uses (22.1–34); the purification and uses of the añjanas (22.35–59), śilājatu (22.60–109), and gairika (22.110–132);¹²² (23) the mahāratnas, their purification, killing and uses: hīraka (diamond; 23.5–42), māṇikya (ruby; 23.43–62), mauktika (pearl; 23.63–86), puṣparāga (topaz; 23.87–95), nīla (sapphire; 23.96–103), marakata (emerald; 23.104–111), vaidūrya (cat's eye; 23.112–119), gomeda (zircon; 23.120–127), and vidruma (coral; 23.128–153);¹²³ the kṣudraratnas, their purification, killing and uses: vaikṛānta (23.155–181), sūryakānta (23.182–186), candrakānta (23.187–190), rājāvarta (23.191–207), peroja (23.208–210), and sphaṭika (23.211–215); (24) the viṣas and upaviṣas, their purification¹²⁴ and uses; the eight poisons unsuitable for alchemical purposes and for rasāyana are: hālāhala, kālakūṭa, śṛṅgaka, pradīpana, saurāṣṭrika, brahmaputra, hāridra, and saktuka (24.7–9); vatsanābha is a useful poison (24.10–162); the upaviṣas are: viṣatinduka (24.165–233), ahiphena (24.234–305), jayapāla (24.306–341), dhattūra (24.342–390), bhaṅgā (24.391–436), guṇjā (24.437–470), bhallātaka (24.471–486), karavīra (24.487–495), lāṅgalī (24.496–509), arkakṣāra (24.510–515), and snuṅkṣāra (24.516–530); snake venom is described, together with its purification and uses (24.531–574); the chapter ends with the purification of the

roots of raktacitraka, the seeds of vṛddhadāraka and nimbūka, the purification of hiṅgu and guggulu (24.575–580).

Sources are not indicated. Caraka is mentioned once (15.92).¹²⁵

Sadānanda's teacher, Narendranātha, is referred to once (6.37–38).¹²⁶

Sadānanda's *Rasatarāṅgiṇī* is quoted in Ambikādattasāstrin's commentary on the *Rasendrasārasaṃgraha*, the *Āyurvedīya Khanijavijñāna*, Guṇrājśarmamūṣa's commentary on the *Āyurvedaprakāśa* and the same author's *Viśikhānupraveśavijñāna*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Rasadhātuprakāśa*, the *Rasatattvavivecana*, the bhasmapīṣṭiprakaraṇa of the *Rasoddhātatantra*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*; it is one of the sources of the *Bheṣajasaṃhitā*, *Rasayogasāgara*, *Rasendrasambhava*, and Yādvajī Trikaṃjī's *Rasāmṛta*. The *Rasatarāṅgiṇī* is profusely quoted in Saṃtoṣ Kumār Śarmā's *Rasabhaiṣajyakalpanāvijñāna*.

Sadānanda is quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Special features

The verses of the *Rasatarāṅgiṇī* are composed by the author himself.

Rasasiddhas enumerated are: Agastya,¹²⁷ Bhairava, Bhāskara, Brahmā, Gora-kṣanātha,¹²⁸ Govinda, Kākaçaṇḍīśvara, Kāpālika, Laṅkeśa, Māṇḍavya, Manthāna-bhairava, Mātta, Nāgabodhi, Nāgārjuna, Nandin, Naravāhana, Narendra, Ratnakośa, Śambhu, Śaṃkara,¹²⁹ Svachchanda-bhairava, Viśārada, Viṣṇu,¹³⁰ Vyāḍi, and Yaśodhana (1.29–32).

Noteworthy yantras described are: bhasmayantra (4.16–17), mṛdaṅgayantra (4.27), bāspasvedanayantra (4.35–38), and darvikāyantra (4.39). Many synonyms of the substances dealt with are enumerated. Two varieties of hiṅgula are mentioned, khaṇija and kṛtrima (9.4), and two varieties of gaurīpāṣāṇa, white and red (11.132). The nārikela-lavaṇa (14.123–130) and arkalavaṇa (14.131–136) are peculiar to the *Rasatarāṅgiṇī*. Varieties of muṇḍa-, tikṣṇa- and kāntaloḥa are not distinguished (20). The upadhātus distinguished are: suvarṇamākṣika,¹³¹ rajatamākṣika,¹³² tutthaka, sindūra, mṛddāraśṛṅga, kharpara or rasaka, kāntapāṣāṇa, and kāsīsa (21). Two types of añjana are distinguished: mecaka or srotoja (= sroto'ñjana) and locaka or suvṛāja (= sauvṛa) (22.35); puṣpāñjana is added (22.49–50). Four varieties of śilājatu are described: sauvarṇa-, rājata-, tāṃra- and lauhaśilājatu (22.64–68), and two varieties of gairika: pāṣāṇa- and svarṇagairika (22.111).¹³³ A number of rasayogas may be peculiar to the *Rasatarāṅgiṇī*.¹³⁴ Types of pearls are not mentioned. Three varieties of vatsanābha are distinguished: kṛṣṇa, kapiśa and pāṇḍu (24.15). Opium is called ahiphena and khasilanirīyāsa (24.237, 241); tinctura opii is described as ahiphenāsava (24.287–297).

Plants and other substances employed in the killing of mercury are: ākhukarṇī, bahuputrikā, balā, bhṛṅgarāja, brahmaṇḍāṇī, cakramarda, caṇḍālinī, devadālī, dhūrtā, dūrvā, girikarṇikā, guḍūci, haṃsapādī, hastiśuṇḍikā, indravāruṇikā, jāti, jayanti, jvalana, kākaṅgā, kākamācī, kākanāsā, kaṇā, kaṭutumbikā, koṣātakī, lajjālu, lākṣā, laṅgali, maṇḍūkapaṇī, matsyākṣī, mūrvā, musali, nīpa, the two kinds of niśā, palāśa, prasāriṇī, punarnavā, rāmaṭha, rambhā, sahadevikā, samantadugdhā, śaṅkhaṇḍikā,

śarapuṅkhikā, sarpākṣī, sarṣapa, śaśilekhā, śephālī, śobhāñjana, somavallārī, śuṅṭhī, surasā, sūrya, sūryabhaktā, tilapaṇikā, vacā, vandhyakarkoṭakī, varṣābhū, vidārikā, viṣṇukrāntā, and yamaciñcikā (7.9–16).

Plants and other substances employed in the killing of mica are: agastya, agnima-ntha, ākhuparṇī, bhādrāmūṣā, bhṛṅgarāja, bilva, brhātī, citraka, cow's urine, dāḍima, devadāru, dhātūra, dūrvā, eraṇḍa, ghoṇṭā, ghṛtakumārīkā, goat's blood, gokṣura, gu-ḍa, guḍūcikā, hīlamocikā, jalakumbhikā, kadambaka, kākamācī, kaṇṭakārī, kāsamarda, kharamañjarī, kokilākṣaka, the three kinds of milky juice (kṣīratraya), lodhra, madana, mālatī, maṇḍūkapaṇī, māriṣa, mātulānī, mīnākṣī, mustā, nāgavallī, pālāṅkyā, pātālī, phalatrika (= triphalā), piṇḍī, prṣṇiparṇī, rambhā, śālīparṇī, śaṅkhaṇḍikā, saptapaṇa, śrīparṇī, śuklasiddhārthaka, śvetapunaṇavā, śyonāka, tagara, tālamūlī, tālīśa, taṇḍulī-yaka, tiktakā, tilapaṇī, tulasī, vājigandhā, vastrarañjanī, the young shoots of the vaṭa, and vṛṣa (10.56–64).¹³⁵

Plants used in the killing of iron are: bhṛṅga, candana, daśamūla, eraṇḍa, hastikarṇapalāśa, hṛtbera, karāñja, nilotpala, nirguṇḍī, parpaṭa, punarnavā, śatamūlī, śīgru, śiṃhikā, surasa, tālamūlikā, triphalā, viḍaṅgaka, viśva, and vṛddhadāraka (20.42–44).

Terms derived from modern chemistry are not uncommon; examples are: bindu-kṣepakayantra (20.160; dropper), caṇḍakāmla (15.25; oxalic acid), gandhakadrāva (8.113–123; sulphuric acid), gandhakāmlīyayaśada (19.149–166; zinc sulphate), lavaṇa-drāva (14.165–184; hydrochloric acid), maṣīśoṣaṇapattrā (24.317; blotting paper), nir-jalā nirmalā surā (21.237; absolute alcohol), sārakapattra (16.83 and 84; filter paper), sorakadrāva (14.47–58) and sorakāmlaka (16.77; nitric acid), sorakāmlīyarajata (16.76–123; silver nitrate), suvarṇalavaṇa (15.34–44; gold chloride), taṅkaṇāmla (13.100–122; boric acid), and varṇapattraka (18.35; litmus paper).

Terms borrowed from western medicine and late āyurveda are, for example: antra-śoṣa (19.61), āntrikajvara (14.182; enteric fever), antrāvaraṇodbhūtajvara (24.43; peritonitis), asthivakratā (15.111; rachitis), dīmbāśaya (16.59 and 61; ovary), granthika-jvara (24.366 and 388; plague), granthiśoṭha (swelling of lymph nodes; 24.389), hṛ-dayāvaraṇaśoṭha (24.43; pericarditis), māṃsatāna (20.89; diphtheria), phiraṅga (15.91), phupphusacchadaśoṭha (24.42; pleurisy), pūyameha (24.95; gonorrhoea), saṃkrā-makāśa (24.408 and 417; whooping cough), śoṇakāyajvara (22.109; scarlet fever), svapnameha (6.120 and 226; 24.400; nocturnal emissions), tāṇḍavagada (20.89), vra-nameha (19.159),¹³⁶ vṛkkaśoṭha (20.87; 24.403), and yoṣāpasmāraka (15.94; 20.88).

Works and authorities quoted or referred to in Haridattasāstrin's Sanskrit commen-tary¹³⁷ on the *Rasatarāṅgiṇī* are: Amara (3.38–39), Āyurvedaprakāśakāra (5.101), *Bhā-vaprakāśa* (5.31), *Bhāvaprakāśīyanighaṇṭu* (24.307–309), Caraka (1.33–34; 24.369–378), dākṣiṇātyāḥ (10.3), *Dhanvantarīyanighaṇṭu* (18.84–95), Govindabagavatpāda (5.106–108), *jyotiḥśāstra* (23.3–4), Kauṭilya (3.38–39), Medinī (24.236), Nāgārjuna (20.22–24), navyarāśayanikāḥ (19.149–151), Narendranātha (6.32–38), *Nighaṇṭu* (13.82–95; 24.131–140), Nityanātha (5.106–108), *Rājanighaṇṭu* (13.45–47), *Rasacintāma-ṇi* (5.106–108), *Rasamādhava*¹³⁸ (5.106–108; 6.1; 10.116; 20.5–6 and 19; 21.55–56), *Rasapaddhati* (5.106–108; 21.64–65), *Rasaratnākara* (5.106–108), *Rasaratnasamucca-ya* (1.18–27), *Rasārṇava* (5.106–108; 7.90–92), *Rasavāgbhaṭa* (4.1; 5.46; 6.7–8), Ra-

sendracūdāmaṇi (5.101), *Rasendrasārasaṃgraha* (4.40), *Rudrādhya* (5.20), *Śāringadhara* (22.54–57), *Śāringadharasamhitā* (17.37–39), *Śivāgama* (5.106–108), *Suśruta* (6.113–128; 13.10–32; 22.88–109), *Vāgbhaṭa* (21.94–96; 22.69–78, 85–86, 88–109), *Vṛddhavāgbhaṭa* (22.85–86; 24.32–60), and *Yogarātnākara* (8.105–108; 21.66).

The author

Sadānanda Śarmaṇ Ghilḍiyāla was the son of Jivānanda, an expert in jyotiḥśāstra, and Sarasvatī (1.2). His teacher, Narendranātha Mitra, assisted him in composing the *Rasatarāṅgiṇī* (1.5–8).¹³⁹

Sadānanda also wrote the *Pāradayogaśāstra* and a commentary on the *Rasakauṇḍī*.¹⁴⁰

Date

The *Rasatarāṅgiṇī* was completed in 1923/24.¹⁴¹

The Rasāyanasāra

The *Rasāyanasāra* by Śyāmasundarācārya¹⁴² is a modern treatise dealing with iatrochemistry, in particular with the aspects pertaining to rasāyana.

Contents

The work consists of about 1,100 verses, arranged in five chapters (prakaraṇa). Chapter one is of an introductory character. Chapter two is concerned with the alchemical laboratory (rasāyanasālā; 1–28) and types of bhrāṣṭrī and puṭa (29–66); the puṭas described are gajaputa, vārāhaputa and kukkūṭaputa.

Chapter three is about technical terms; its subjects are: nāndī (2–5), kajjalī (6), bhāvanā (7), vālukā (8–9), a definition of mudrā (10), mṛṭpuṭa (11), sampuṭa (12), svāṅgaśīta (13), types of mudrā (14–23), yantras (24–54), kāñjī (55–60), kṣāra (61–73), amṛtapañcaka (74),¹⁴³ mitrapañcaka (75), biḍa (76), types of saṃdamśa (77–79), and agnyākarsakadarvī (80).

Chapter four is concerned with: the eulogy of mercury (1–18); its purification (19–21); the preparation of mercury from cinnabar (22–45); sulphur, its varieties and purification (46–101); the stimulation of the appetite (bubhukṣā) of mercury, i.e., its ability to digest and assimilate other substances, and how to feed it (103–154); the preparation of several types of candrodāya (mixtures of mercury and sulphur): tālacandrodāya (183–198), śilācandrodāya (199–209), mallācandrodāya (210–221), viṣacandrodāya (222–229), sattvacandrodāya (230–239), antardhūmacandrodāya (240–249), and various other ones (250–252); the preparation of makaradhva (256–261), svarṇasindūra (262–267), sindūrarasa (268–283), pravāsasindūra (284–294), mūrchanānāsa (295–296), tālādicandrodāya (297–305), saṃgrahasindūrarasa (306–310), and rasakarpūra (311–321); the chapter ends with praising the mūrchā of mercury (322–324).

Chapter five gives an account of the purification and killing of the metals (dhātu) and upadhātus, together with allied topics. Its subjects are: the purification and

killing of gold (5–22), rasāyana formulae (23–26), the medicinal properties of gold (27), anupānas to be taken along with suvarṇabhasman (28), disorders arising from impure suvarṇabhasman and their treatment; the purification and killing of silver (31–36), the properties of rajatabhasman, a rasāyana, defects of rajatabhasman and their removal (37–41); the purification and killing of the naipāla variety of copper (46–58), the nirutthikaraṇa and amṛtikaraṇa of the bhasman of copper (59–68); the extraction (niḥsāraṇa) of copper from tuttha and its purification, the preparation of tuttha (69–79), other methods of killing copper (80–106), the purification of tāmrabhasman, its medicinal properties and the treatment of disorders caused by impure tāmrabhasman (107–109); the khura variety of tin, its purification and the description of the piṭharayantra used to purify tin, lead and zinc (116–133), the killing of tin (134–167), the medicinal properties of the bhasman (168), the anupānas to be taken (169–176), rasāyanas (177–181), disorders caused by impurities and their treatment (182–184); the purification and killing of lead (185–200), a rasāyana (201–205), the medicinal properties of the bhasman of lead (206), disorders due to impurities and their treatment (207–208); the purification and killing of zinc (jasada; 209–215), anupānas (216–217), disorders caused by zinc and their treatment (218–220); the killing of kāmśya and rājariti (= pittala), followed by some rasāyana formulae (221–227); the purification and killing of the alloys called vṛta and vartaka (228–230); the purification and killing of iron (231–264), rasāyana formulae (265–271), the medicinal properties of lohābhasman (272–273), and the treatment of disorders caused by impure lohābhasman (274).

Three different opinions regarding the substances which should be regarded as upadhātus are referred to; the seven upadhātus consist of: (1) tāpya (= suvarṇamāṅśika), vimāla (= raupyamāṅśika), tuttha, (ayo)mala (= maṇḍūra), kaṅkuṣṭha, sindūra, and netrya (= gairika); (2) svarṇamāṅśika, tāramāṅśika, sindūra, kāmśya, (śilā)jatu, tuttha, and rīti (= pittala); (3) nīlāñjana, māṅśika, tuttha, śilā(jatu), āla, rasaka, and abhra (275–277).

Chapter five continues with the following subjects: the purification and killing of suvarṇa-, raupya- and kāmśyamāṅśika (278–284), the medicinal properties of these substances, the disorders caused by impurities left, and the treatment of these disorders (285–290); the purification and killing of naturally occurring and chemically prepared (khanija and kṛtrima) tuttha (291–294); the purification, killing and properties of kaṅkuṣṭha (295–297); the purification and properties of sindūra (298–299); the description of maṇḍūra, its purification and killing, the preparation of haṃsamaṇḍūra and maṇḍūravatī (300–314); the description of nīlāñjana (black in colour), puṣpāñjana (white in colour), rasāñjana, sauvīrāñjana (similar to nīlāñjana), and sroto'ñjana (similar to puṣpāñjana) (315–318), followed by the preparation of hitāñjana (319–320); the description of vajrakāśisa, its killing and its properties (321–323); the description of vajrabhṛka, its purification, niścandrikaraṇa,¹⁴⁴ killing, the plants used in this process, the properties of the bhasman, dhānyābhṛka, rasāyanas, disorders brought about by impure abhṛka and their treatment (324–376); the varieties of haritāla, its purification and killing (377–386); the killing of manāḥśilā and malla (387); the killing of godanta(haritāla) (308); the preparation of gandhaka-, malla-, manāḥśilā- and haritā-

lataila (389–405); the description of śaṅkha, śambūka, muktāśukti, jalaśukti, kapardī and vidrūma, together with their medicinal properties (406–422); the preparation of kācabhasman and kācasuvarṇabhasman (425–429); the purification of taṅkaṇa, kāṅkṣī, viṣa, gairika, jāipāla, and bhallātaka (430–441); the purification and killing of the gems (ratna) (442–444).

Chapter six (cikitsāprakarāṇa; 166 verses) consists of a collection of rasayogas against a series of diseases which are more or less arranged in agreement with the *Mādhavanidāna*. Most of these formulae, or even all of them, are not borrowed from earlier treatises, but were composed by the author.

Apart from Caraka (5.241–245), Suśruta (5.236–240) and Vāgbhaṭa (5.248), sources are not indicated. The author refers to the views of the vedāntinaḥ, śaktivādinaḥ (4.63) and Jains (4.65, 139–140); he also mentions an opinion held by a yūnānavaidya (5.65–67).

The *Rasāyanasāra* is quoted in the *Āyurvedīya Khanijavijñāna*, Guḷrājśarmamīśra's commentary on the *Āyurvedaprakāśa*, and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*; it is one of the sources of the *Bheṣajasaṃhitā*, Hariśaraṇānanda's *Kūpīpakvarasānirmānavijñāna*, the *Rasadhātuprakāśa*, the *Rasayogasāgara* and the *Rasendrasambhava*.

Śyāma and Śyāmasundarācārya are quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

Special features

The verses of the *Rasāyanasāra* were composed by the author himself.¹⁴⁵ The contents are based on his own experience.¹⁴⁶ Opinions of earlier authorities are repeatedly referred to,¹⁴⁷ occasionally followed by the author's own view.¹⁴⁸ Vāgbhaṭa's rules about the application of an āñjana¹⁴⁹ are rejected by Śyāmasundara, who prefers Caraka's exposition on this subject.¹⁵⁰

The apparatus called bhrāṣṭrī (a furnace) is not described in other treatises; Śyāmasundara distinguishes five types: vālukāyantrabhrāṣṭrī, kvāthakarī bhrāṣṭrī, śodhanārthabhrāṣṭrī, tālādibhasmakarī bhrāṣṭrī, and sarvārthakarī bhrāṣṭrī (2.29–61).

Some technical terms explained in chapter three are: nāṇḍī (3.2–5),¹⁵¹ mṛtṭṭa (3.11),¹⁵² and saṃputa (3.12).¹⁵³ Types of mudrā¹⁵⁴ described are: vajra-, dṛḍha-, madhyama-, sādhanāraṇa-, and sikatāsītāmudrā (3.14–21). Unusual names of yantras are: khalvacūrṇādiyantra, used for the preparation of haritālābhasman (3.27–30), vālukāgarbhapātālayāntra, used for preparing oils (3.31–34), talapātāyantra, also used for preparing oils (3.35–36), nalikāḍamarūyantra, used for the preparation of svarṇasindūra (3.43–44), ūṣmayāntra, used for preparing oils (3.45–46), and svarasayantra, used for preparing a svarasa (3.47–49). Types of saṃdamṣa (a pair of tongs) described are: yantrotthāpana-, ākarṣaka-, and saṃputasāṃdamṣa (3.77–79). A special type of ladle is the agnyākarsakadarvī (3.80).

A khaṭvāṅgayāntra is repeatedly mentioned (4.20 and 47; 5.42, 141, 255).¹⁵⁵ The pītharayantra, described in chapter five (5.116–133), and used for the purification of tin, lead and zinc, is not known (under this name) from other treatises.

The alloy vṛta is a mixture of kāmśya, iron and pittala; the alloy vartaka is com-

posed of pittala, kāmśya, tin, lead and iron (5.228). Kāmśya and pittala are regarded as belonging to the upadhātus (5.222).

Some uncommon terms often employed in the *Rasāyanasāra* are cakrī (a bolus; 5.152, 156, 196, 306; 6.95) and śīṣī (a small bottle 4.290; 5.164).

Noteworthy items of Śyāmasundara's materia medica are barburā (4.258), barburīkā (5.267), grāhamada (5.23),¹⁵⁶ and ṭṣagdola (6.107).¹⁵⁷

The author¹⁵⁸

Śyāmasundara, son of Nandakīśora, a Mārvarī Agravāla vaiśya, was born in Kāmavana in Bharatpur in 1871 or 1872. His teachers were Paṇḍit Arjunamīśra, Rāmamīśra Śāstrī and Umācaraṇa Kavirāja. In the year 1918 he moved to Vārāṇasī in order to teach *rasāyanasāstra* at the Banaras Hindu University. He died in 1918 according to P.V. Sharma.¹⁵⁹

Apart from the *Rasāyanasāra*, he wrote the *Anupānavidhi*.¹⁶⁰

Date

The *Rasāyanasāra* was composed in the first quarter of the twentieth century.

The *Rasayogasāgara*

The *Rasayogasāgara* by Hariprapanna Śarmaṇ¹⁶¹ is an extensive collection of rasayogas, compiled from a large number of sources. The work contains a total number of 3,878 formulae, alphabetically arranged: akārādi (447 formulae), kakārādi (559 formulae), cakārādi (323 formulae), takārādi (467 formulae), pakārādi (719 formulae), yakārādi (650 formulae), and śakārādi (713 formulae). This collection is supplemented by the Sanskrit versions of 115 rasas from works in Tamil, attributed to Agastya and Vyāsa, 36 rasas from sources in Telugu and other languages, and 97 additional rasayogas. The parīśiṣṭa section also contains descriptions of diseases occurring in the *Basavarājīya*, and both verses and prose concerning weights and measures (quoted from the *Suśrutasamhitā*, *Śārṅgadharasamhitā*, *Kṛṣṇātreyasamhitā*, *Līlāvātī*, *Vaijayantīkośa*, and *Manu*).

Printed sources of the *Rasayogasāgara* are: *Āgneyapurāṇa*, *Aṣṭāṅgahṛdaya*, *Aṣṭāṅgasamgraha*, *Āyurvedaprakāśa* by Mādhava, *Āyurvedavijñāna* by Binod Lal Sen, *Bhaiṣajyaratnāvalī* by Govindadāsa, *Bhelasamhitā*, *Bhāvaprakāśa*, *Bṛhadyogataraṅgiṇī*, *Bṛhatsamhitā*, *Cakradatta*, *Carakasamhitā*, *Cikitsākalikā* by Tisāṭa, *Cikitsākramakalpavallī* by Kāśinātha, *Cikitsāsāra* by Gopāladāsa, *Dhanvantari* by Śālagrāma, *Gadanigraha*, *Hārītasamhitā*, *Hitopadeśa* by Śrīkaṇṭhasūri, *Kāmaratna*, *Narapatījayacaryā* by Narapati, *Nighaṇṭuratnākara*, *Pākāvalī*, *Rājāmārtaṇḍa* by Bhoja, *Rasa-ṇḍāṃśu* by Dattātreyā, *Rasacintāmaṇi* by Anantadeva, *Rasaḥṛdaya*, *Rasamañjarī* by Śālinātha, *Rasaprakāśasudhākara*, *Rasarājasundara* by Dattārāma, *Rasaratnākara* by Nityanātha, *Rasaratnasamuccaya* by Vāgbhaṭa, *Rasārṇava*, *Rasasaṃketakalikā*, *Rasasāra* by Govindācārya, *Rasatarāṅgiṇī* by Sadānanda, *Rasāyanakhaṇḍa* by Nityanātha, *Rasāyanasāra* by Śyāmasundarācārya, *Rasendracintāmaṇi* by Dhunḍhukanātha, *Rasendrasārasamgraha* by Gopālākṛṣṇa, *Śārṅgadharasamhitā*, *Siddhabheṣajamañimā-*

lā, *Suśrutasaṃhitā*, *Triśatī* by Śārṅgadharma, *Vaidyajiṇa* by Lolimbarāja, *Vaidyakaḷpadruma* by Raghunāthaprasāda, *Vaidyāmṛta* by Moreśvara, *Vaidyarahasya* by Vidyāpati, *Vaṅgasena*, *Vṇdamādhava*, *Yogacintāmaṇi* by Harṣakīrti, and *Yogarātnākara*.

Manuscript sources are: *Bāhaṭa* by Gaurīputrakārttikeya, *Basavarājīya*, *Bhaiṣajya-sārāmṛtasamhitā* by Upendra, *Cikitsārahasya* by Hārītamuni, *Cikitsāratnābharāṇa* by Sadānandadādhīca, *Lohapaddhati* by Sureśvara, *Nārāyaṇavilāsa* by Nārāyaṇabhūpati, *Nūtanakalpa*, *Pāradayogaśāstra* by Śivarāmayogīndra, *Rasabodhacandrodaya*, *Rasādīpikā* by Ānandānubhava, *Rasajñāna* by Jñānāyoti, *Rasakalpalatā* by Magnirāma, *Rasakāmadhenu* by Cūḍamaṇi, *Rasakaṅkāliya* by Kaṅkālayogin, *Rasakaumudī* by Jñānācandra, *Rasakaumudī* by Śaktivallabha, *Rasakinnara*, *Rasālakṣara* by Bhaṭṭarāmeśvara, *Rasamuktāvalī*, *Rasapaddhati* by Bindu, *Rasapārijāta*, *Rasapradīpa* by Prāṇanātha, *Rasarājālakṣmī* by Viṣṇupaṇḍita, *Rasarājaśaṃkara* by Rāmakṣṇa, *Rasarājaśiromaṇi* by Paraśurāma, *Rasaratnadīpikā* by Rāmarāja, *Rasaratnakaumudī*, *Rasaratnamānimālā* by Bābābhāi Vaidya, *Rasasāgara* by Kṣemāditya, *Rasasaṃgrahasiddhānta* by Govindarāma, *Rasasārasaṃgraha*, *Rasāvatāra* (anonymous), *Rasāvatāra* by Māṇikyacandra, *Rasāyanaparīkṣā*, *Rasāyanasaṃgraha* by Kṛṣṇaśāstrī Bhāṭavadekar, *Rasendracūḍāmaṇi* by Somadeva, *Rasendrakalpadruma* by Rāmakṣṇabhāṭṭa, *Rasendramaṅgala* by Nāgārjuna, *Rasendraratnaśaṅka* by Deveśvara Upādhyāya, *Ratnākaraśaḍhayoga*, *Strīvilāsa* by Deveśvara Upādhyāya, *Sūtapradīpikā*, *Ṭoḍarānanda*, *Vaidyacintāmaṇi*, *Vaidyacintāmaṇi* (laghu), *Vaidyadarpaṇa* by Prāṇanātha, *Vaidyavilāsa* by Raghunāthapaṇḍita, *Yogacandrikā* by Lakṣmaṇa, *Yogamahārṇava* by Rāmanātha, *Yogasamgraha*, and *Yogasamuccaya* by Vyāsapaṇḍita.

The *Rasayogasāgara* is quoted in the *Āyurvedīya Khanijavijñāna*; it is one of the sources of the *Rasendrasambhava*.

Some of the *rasayogas* collected in the *Rasayogasāgara* have been studied.¹⁶²

The author

The author does not give any information on his genealogy, place of residence, etc., in the introductory verses and the verses at the end of volume I. He lived in Bombay as an Ayurvedic practitioner and also wrote a work in Sanskrit called *Klodayathātathya*.¹⁶³

Date

The *Rasayogasāgara* was compiled in the years preceding its publication.

The *Rasayogaśataka*

The *Rasayogaśataka* by Pradyumna Śarmā Nilāṅgekar¹⁶⁴ is a small treatise in 254 verses, which consists of a collection of about 125 prescriptions against a series of diseases which are arranged in agreement with the *Mādhavanidāna*.

The work is a Sanskrit version of the *Vaidyasmṛti*, written in Marāṭhī by the author's father, Govinda Śarmā.¹⁶⁵ The verses are composed in a variety of metres. Most of the formulae are of a simple type.

In spite of the title and the author's praise of *rasaśāstra* in his *Nivedana*, the

Rasayogaśataka does not only contain *rasayogas*, but also about thirty prescriptions of an āyurvedic type without ingredients characteristic of iatrochemistry.

The author enlarged upon the work of his father by adding a series of *rasāyana* and *vājikaraṇa* formulae, some prescriptions against women's diseases, some verses on *bhasmaparīkṣā* (228–231) and *rasaśodhana* (232–236), and, finally, some contraceptive prescriptions (246–249).¹⁶⁶

Some formulae derive from earlier authorities (*pūrvacārya*), one formula (220–221) is attributed to Somanātha, but, in general, sources are not referred to.

The author belonged to a family of *vaidyas* and was a practising physician in Hyderabad.¹⁶⁷ He was a son of Gaṅgā and Govinda, and a grandson of Lakṣmī and Varadarāja.¹⁶⁸

The *Rasendracintāmaṇi*

The *Rasendracintāmaṇi*, ascribed to Dhunḍhukanātha or to Rāmacandra Guha,¹⁶⁹ is a treatise on alchemy and iatrochemistry. Its structure resembles that of the *Rasendrasaṃgraha*, but, in contrast with the latter work, it also deals with *deha-* and *lohadēha*.

Contents¹⁷⁰

Chapter one (*śāstrāvatāra*; 1–6) is of an introductory nature; it contains a eulogy of mercury and its products, which enable a human being to obtain an indestructible (*ajarā-mara*) body, *khēcaratva* and *śivatva* (4). Six types of benefit result from the *darśana*, *sparśana*, *bhākṣaṇa*, *smaraṇa*, *pūjana* and *dāna* of mercury (4–5). Mercury, when free from blemishes, is like *Brahmā*; it is like *Janārdana* when *mūrchita*, like *Rudra* when *mārīta*, like *Sadāśiva* when *baddha* (5).

Chapter two (*mūrchanādhyāya*; 6–10) describes *gandhakajāraṇa*, two *sikatāyantras*, the preparation of *kajjali* and *nigaḍa*. Chapter three (*bandhanādhyāya*; 10–23) enumerates nineteen *saṃskāras*: *svedana*, *mardana*, *mūrchana*, *utthāpana*, *pātana*, *bodhana*, *niyamana*, *dīpana*, *anuvāsana*, *gaganādigrāsapramāṇa*, *cāraṇa*, *garbhadruti*, *bāhyadruti*, *yogajāraṇa*, *rañjana*, *sāraṇa*, *krāmaṇa*, *vedhana*, and *bhākṣaṇa* (10). *Saṃskāras* described in the chapter are *mardana*, *mūrchana*, *utthāpana* (10–11), *svedana* (12), *ūrdhva-*, *adhaḥ-*, and *tiryakpātana* (12–13), *bodhana* (13–14), *niyamana* (14), *dīpana* (14), *anuvāsana* (14–15), *grāsana* (15–16), *cāraṇa* (16–18), *jāraṇa* (18–21), and *druti* (21–23). Chapter three also gives an account of the *taptakhalla* and *dolāyantra* (18). Chapter four (*puṭapākādhyāya*; 23–36) continues the description of the *saṃskāras*: *rañjana* (23–24), *sāraṇa* and the *gandharvataila* used for this purpose (24–28),¹⁷¹ *krāmaṇa* (29), *vedhana*, *kṣetrīkaraṇa*, and *bhākṣaṇa* (29–36).

Chapter five (*abhrīya*; 36–41) is concerned with the mica (*abhraka*), its *sattva* (37), *druti* (38–39), *māraṇa* (39), *amṛtikaraṇa* (39–40), *sattvapātana*, and *sattvadruti* (40–41). Chapter six (*sarvagandhakādhyāya*; 41–43) is about sulphur (*gandhaka*), its purification (41–43), and the preparation of *gandhataila* (43).

Chapter seven (*sarvalauhādhyāya*; 44–52) is concerned with the purification and killing of the seven metals (*loha*; *dhātu*): gold, silver, copper, iron, lead, tin, *rīṭikā* or *rājārīṭi* (brass), and *kāṃsya* (bronze). Chapter eight (*viśopaviśasādhana*; 52–65) deals

with the viṣas and upaviṣas (52–57), vajra and vaikrānta (57–58), tālaka, tuttha, bhūnāga, manāṣilā, kharpara, vimala, māṅṣṭika, kāśīśa, kāntapāṣaṇa, varāṭikā, hīngula, maṇḍūra (58–64), and the nine gems (ratna; 64–65).

Chapter nine (prayogīya; 66–195) is about the medicinal uses of mercurial and other metallic preparations. The first part of this long chapter (66–96) is called rasāyanādhikāra and contains, as indicated by this name, rasāyana formulae and prescriptions. The second part is devoted to rasayogas against diseases which are arranged in conformity with the *Mādhavanidāna*.

The *Rasendracintāmaṇi*, chiefly written in verse, is accompanied by passages in prose which repeatedly give the impression of being an auto-commentary or a collection of glosses.¹⁷²

The work itself is based on earlier treatises,¹⁷³ the teachings of the author's guru, and, in particular, his personal experience.¹⁷⁴

Authorities and works mentioned in chapters one to eight are: *Bhuṣuṇḍopākhyāna* (3),¹⁷⁵ Govinda (21),¹⁷⁶ Nāgārjuna (13),¹⁷⁷ Nityanātha (22), *Rasaḥṛdaya* (25), *Rasārṇava* (3; 6), *Siddhīlakṣmīśvara* (44),¹⁷⁸ *tantrāntara* (17), and *Vaśiṣṭha* (3).¹⁷⁹

Schools of interpretation are alluded to (69).¹⁸⁰

Chapter nine mentions many divine and other authorities to whom formulae are attributed.¹⁸¹

Numerous rasayogas of chapter nine are also found in the *Rasendrasārasaṃgraha*.¹⁸²

The *Rasendracintāmaṇi* is quoted or referred to in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the *Āyurvedavijñāna*, *Āyurvedīya Khanijavijñāna*, *Bhāvaprakāśa*, *Bheṣajasaṃhitā*, *Bṛhadrasarajasundara*, *Gulrājśarmamiśra's* commentary on the *Āyurvedaprakāśa*, *Hariśaraṇānanda's Kūpīpakvarasanirmānavijñāna*, the *Pāradasaṃhitā*, *Rasajalanidhi*,¹⁸³ *Rasakāmadhenu*, *Rasatattvavivecana*, *Rasavidyāmahārṇava*, *Rasāyanasaṃgraha*, *Rasayogasāgara*, *Rasoddhāratāntara*, *Somadevaśarman's* commentary on the *Āyurvedaprakāśa*, *Trimaḷla's Yogarataraṅgiṇī* and *Bṛhadyogatarāṅgiṇī*, *Vaidyārāja's Sukhabodha*, and the *Yogarātnākara*.

Mādhava's *Āyurvedaprakāśa* quotes numerous verses from the *Rasendracintāmaṇi*.¹⁸⁴

Dhūṇḍhukanātha is quoted in *Gulrājśarmamiśra's* commentary on the *Āyurvedaprakāśa* and *Hazārīlāl Sukul's* commentary on the *Rasaratnasamuccaya*.

A commentary (ṭīkā) on the *Rasendracintāmaṇi* by Maṇirāma is quoted in *Gulrājśarmamiśra's* commentary on the *Āyurvedaprakāśa*. A short commentary by *Ramānātha Gaṇaka* is recorded,¹⁸⁵

Special features

Eighteen poisonous substances are distinguished;¹⁸⁶ eight of these, śaktuka, mustaka, kaurma, darvika, sārṣapa, saikata, vatsanābhaka¹⁸⁷ and śrṅgī,¹⁸⁸ may be used for medicinal purposes and rasāyana; the other ten, suitable for rasāyana, dhātuvāda and viṣavāda purposes, are: kālakūṭa, meṣaśrṅgī, dardūra, halāhala, karkoṭa, granthi, hāridra, raktaśrṅgī, keśara, and yamadamaṣṭrā (52–54). Poisonous substances are also divided into four

classes: brāhmaṇa, kṣatriya, vaiśya and śūdra, identifiable by their colours; white, red, yellow and black. Eight stages (vega) of intoxication are enumerated, characterized respectively by praśama, vepathu, dāha, patana, phena, vikalatā, jaḍatā, and maraṇa. A second classification, recognized by some authorities, distinguishes nine major (viṣa) and seven minor (upaviṣa) poisons; the nine major poisons are: kālakūṭa, vatsanābha, śrṅgika, pradīpana, halāhala, brahmaputra, hāridra, śaktuka, and saurāṣṭrika; the seven minor poisons are: arka, sehuṇḍa, dhustūra, lāṅgālī, karavīraka, guṇjā, and ahiphena (56–57).

Some remarkable names of disorders in the formulae are: agramāṃsa (176),¹⁸⁹ bāhukampa (trembling of the arms; 149), jaṅghākampa (trembling of the legs; 149), lūtā (121; 192), and śukrapravāha (spermatorrhoea; 127).

The author

The *Rasendracintāmaṇi* is ascribed to Dhūṇḍhukanātha¹⁹⁰ and to Rāmacandra of the Guha family.¹⁹¹ The improbable view that Dhūṇḍhukanātha is a corruption of Daṇḍakanātha, i.e., Rāma, the son of Daśaratha,¹⁹² which would make the author identical with the hero of the *Rāmāyaṇa*,¹⁹³ was already rejected by Girīndranāth Mukhopādhyāya.¹⁹⁴ Some scholars assume that both Dhūṇḍhukanātha and Rāmacandra Guha wrote a treatise called *Rasendracintāmaṇi*.¹⁹⁵

Dhūṇḍhukanātha was a pupil of Kālanātha.¹⁹⁶

Rāmacandra is sometimes credited with the *Rasapārijāta*,¹⁹⁷ a *Rasapradīpa*,¹⁹⁸ and a *Cakradattanāmakagrantha*.¹⁹⁹ G. Hāldār²⁰⁰ ascribes a *Rasaratnākara* to him. He is also identified with the author of the *Rādhāvinodakāvya*.²⁰¹

Date

The *Rasendracintāmaṇi* is posterior to the *Rasārṇava* and *Rasaḥṛdaya*, works quoted in it; it is also later than the *Rasaratnākara*, whose author, Nityanātha, is mentioned. The terminus ante quem is provided by the *Bhāvaprakāśa* and *Rasakāmadhenu* which refer to it. This evidence implies that the *Rasendracintāmaṇi* was written between the middle of the fifteenth century and the second half of the sixteenth century.²⁰²

The *Rasendracūḍāmaṇi*

The *Rasendracūḍāmaṇi* by Somadeva²⁰³ is an important, systematically arranged, treatise on alchemy and iatrochemistry.

Contents²⁰⁴

The work consists of 1,398 verses, arranged in sixteen chapters (adhyāya).

Chapter one²⁰⁵ (rasamahiman; 52 verses) contains maṅgalas addressed to Śiva and Rāma (1–2), a verse in praise of Raseśvara (3), a description of Rasamahābhairava (4), a verse praising Rasāikuṣī (5), verses in homage of the Kaulikas²⁰⁶ and their lord (iśvara), Kaulika, i.e., Maheśvara (6–12),²⁰⁷ and a description of the despised pākhaṇḍakaulika, who is a nāstika and vedanindaka (13); it deals with the mukti that can be reached by those adhering to the kaulika tradition, but not by the pākhaṇḍas (heretics)

(14–17), and with the importance of the body (18–24); the remaining part of the chapter is devoted to a eulogy of mercury and allied subjects.

Chapter two (*śiṣyopānayanādi*; 63 verses) begins with some verses giving information on the author and the purport of the chapter, which is called *sūtrasthāna* here (1–3). Subjects dealt with are: the initiation of a pupil (*śiṣyopānayanā*; 4–8), the characteristics of the teacher and the *sādhaka* (9–12), the *jāraṇa* of mercury (14–22), the four faculties called *śakti* (23–24), the *pūjā* of Maheśvara and his attendants (25–29), and the *pūjā* of Rasabhairava and *Rasāṅkuṣā* (30–57); the chapter ends with some verses on *rasaśāstra*.

Chapter three (*rasaśālānirūpaṇa*; 35 verses) describes the laboratory (*rasaśālā*) and its inventory (1–20ab), some implements (20cd–23), and the persons who are qualified to take part in alchemical operations (24–35).

Chapter four (*paribhāṣā*; 117 verses) gives definitions (*paribhāṣa*) of a large number of technical terms, and one formula, called *siddhacaparāśara* (58cd–71).

Chapter five (164 verses) contains descriptions of thirty *yantras* (3–94), sixteen types of *mūṣā* (103–126), four types of *koṣṭhī* (128–143), and ten types of *puṭa* (148–161);²⁰⁸ subsidiary subjects are *jalamṛd* (57cd–58),²⁰⁹ *vahnimṛtsnā* (5.59–61),²¹⁰ the *mūṣā* in general (95–98), *sandhilepana* (99),²¹¹ the clay (*mṛttikā*) and other substances used for the *mūṣā* (100–102), the *vaṅganāla* (141–142ab),²¹² *puṭa* in general (144–147), types of *puṭa* left undescribed (162), and the synonyms of *upala* (cow dung used as fuel; 163).

Chapter six (72 verses) opens with verses characterizing a divine herb (*divyauśadhi*), enumerating four categories of alchemically important drugs of vegetable origin (*rasauśadhi*, *mahauśadhi*, *siddhauśadhi*, *divyauśadhi*), and listing the six types of *divyauśadhi*: *vṛkṣa*, *valī*, *latā*, *gulma*, *ṛṇa*, and *kanda* (1–5). The main part (6–71) is devoted to a description of the sixty-four *divyauśadhis*, which are particularly suitable to achieve the *bandha* of mercury.

Chapter seven (eleven verses) contains a list of the names of the sixty-eight *rasauśadhis*, which are not described by Somadeva. These plants are said to grow in the *Vindhya*s and in the *Himālaya* and on the mountains called *Malaya*, *Gomantaka*,²¹³ *Śrīgiri*,²¹⁴ *Sahya*,²¹⁵ *Pāriyātraka*,²¹⁶ *Kiṣkindha*,²¹⁷ *Māhendra*,²¹⁸ and *Mālyavanta*.²¹⁹

Chapter eight (48 verses) enumerates forty-six plants, forming the *sarpākṣyādigaṇa*, which are especially useful in the *niyamana* of mercury, for which reason they are called *niyāmikāḥ* (1–8ab), eighty-four plants, useful in making *rasabhasman*, which form the *vyāghrikādigaṇa* (9cd–20), forty plants, forming the *raktasnuhyādigaṇa*, employed in the killing and *bandha* of mercury (21–28), eight plants, forming the *kadalyādigaṇa*, which promote the liquefaction (*drāvaṇa*) of metals, *rasas*, etc. (29–30), and eighteen plants, constituting the *kākamācyādigaṇa*, which are employed in the *saṃskāra* called *krāmaṇa* (31–33); four particularly powerful herbs are separately described: *ekavīra*, *mahāvīra*, *prayoga*,²²⁰ and *hemadaṇḍikā* or *hemavallī* (34–41); the thirteen (organic and inorganic) drugs of the *vajradāṇḍivarga* are useful in *rasāyana* preparations (42–44), the eight plants of the *bhūpātalyādivarga* promote the *bandha* of mercury (45–46ab), and the five plants of the *pañcaratnakagaṇa* are suitable to achieve *deha* and *lohasiddhi* (46cd–47).

Chapter nine (*paribhāṣāprakaraṇa*; 31 verses) describes groups of substances and their properties: *madhuratraya* (1ab), *mūtravarga* (1cd–2ab), *pañcamṛttikā* (2cd–3ab), *kṣāratraya* (3cd), *kṣāravarga* (4–6ab), *amlavarga* (6cd–8), *lavaṇavarga* (9–10), *viṣavarga* (11–12), *upaviṣavarga* (13–14ab), *tailavarga* (15–16ab), *dugdhavarga* (16cd–18ab), *pittavarga* (18cd–19), *vasāvarga* (20), *viḍvarga* (21–22ab), *raktavarga* (22cd–23), *pīṭavarga* (24), *śvetavarga* (25), *kṛṣṇavarga* (26), *śodhanīyagaṇa* (28), *lohakāṭhinyanāśanayoga* (29), and *drāvaṇagana* (30).

Chapter ten (147 verses) deals with the eight *mahārasas*: *ghana* (= *abhraka*), *rājavarta*, *vaikrānta*, *sasya*, *vimala*, *adrijāta* (= *śilājatu*), *tuttha* and *tāpya* (= *mākṣika*) (1).

Its subjects are: *abhraka* (mica), its four varieties, its purification and killing, the extraction of its essence, the purification, softening and killing of this essence (2–54); the purification and killing of *rājavarta*, followed by the extraction of its essence (55–60); the purification, killing, the extraction of the essence, etc., of *vaikrānta* (61–71ab), *sasyaka* (71cd–84),²²¹ *vimala* (85–94), *śilājatu* (95–110ab), *rasaka* (110cd–128),²²² and *mākṣika* (129–147).

Chapter eleven (114 verses) gives an account of the eight *uparasas* and the eight *sādhāraṇarasas*.

The eight *uparasas* are:²²³ *gandhāśman* (= *gandhaka*), *tāla* (= *haritāla*), *tuvarī*, *kunaṭī* (= *manaḥśilā*), *suṅvīra* (= *sauvīrāṇjana*), *kaṅkuṣṭha*, *khacara* (= *kāśisa*), and *gairika* (1).

The subjects of the first part of the chapter are: sulphur (*gandhaka*), its four varieties, its properties, a story explaining why sulphur is also called *balivasā*,²²⁴ the purification and liquefaction (*druti*) of sulphur, uses of sulphur and its products (2–31); the varieties, properties, purification, etc., of *haritāla* (32–48), *tuvarī* (49–53), *manaḥśilā* (54–61), *aṇjana* (62–68), *kaṅkuṣṭha*,²²⁵ (69–77), *kāśisa* (78–84), and *gairika* (85–89).

The second part of the chapter is concerned with the eight *sādhāraṇarasas*: *kampilla*,²²⁶ *gaurīpāśāṇa*,²²⁷ *navasāraka*,²²⁸ *kaparda*,²²⁹ *vahnijāra* (= *agnijāra*),²³⁰ *girisindūra*,²³¹ *hīṅgula*, and *boddāraśṛṅga*,²³² (90–91). Somadeva describes these substances and their properties; he adds verses on the purification of *varāṭikā* (= *kaparda*) and *hīṅgula* (*cinnabar*), a verse on the purification of *sādhāraṇarasas* in general, and a verse on mixing of the purified essences of *uparasas* and *sādhāraṇarasas*; *agnijāra*, however, need not be purified²³³ (92–114).

Chapter twelve (68 verses) deals with the nine gems (*ratna*): *māṇikya* (ruby), *muktāphala* (pearl), *vidruma* (coral), *tārksya* (emerald), *puṣpa* (topaz), *bhidura* (diamond), *nīla* (sapphire), *gomedaka* (zircon), and *vidūraka* (cat's eye). The varieties, characteristics, blemishes and properties of these gems are described.

The ruby is of two varieties (*padmarāga* and *nīlagandhi*); the number of its blemishes is eight (14–16). The pearl (8–10) has nine characteristics. The emerald has seven characteristics and a large number of blemishes (14–16). The topaz presents eight good and nine bad characteristics (17–19). Diamonds are classified as male, female and *napuṃsaka*, or, according to their colour, as *brāhmaṇa*, *kṣatriya*, *vaiśya* and *śūdra* (20–25); the five blemishes that may be found in all gems are listed (27–28);²³⁴ subjects added are the purification and killing of diamonds, the use of their *bhasman*, and a *rasāyana* formula (29–43). Two varieties of sapphire are distinguished: *jalanīla*

and indranīla (44–47). The zircon has eight good and seven bad characteristics (48–50). Cat's eyes have six good and six bad characteristics (51–52). The general methods of purifying and killing gems are described (54–56), followed by a procedure to liquefy (druti) them (57–65). The chapter ends with the advantages of wearing gems (66).

Chapter thirteen (78 verses) lists the following nine metals: (1) śuddhaloha: kanaka (gold), rajata (silver), bhānu (copper) and aśmasāra (iron), (2) pūṭiloha: nāga (lead) and tin (vaṅga), (3) mīśraloha (alloys): pittala, kāṁsya and varta (1). The terms dhātu and loha are used to denote metals.

Gold²³⁵ is of five varieties; its purification and killing are described, followed by the properties and uses of its bhasman (2–25). Silver (26–39)²³⁶ and copper (40–76)²³⁷ are similarly described. The usual three types of iron²³⁸ are distinguished: muṇḍa (cast iron), tīkṣṇa, and kānta (steel). Muṇḍa is of three varieties, the last of which is called kaḍāraka; the varieties of tīkṣṇa are khara, sāra, honnāla, tārapaṭṭa and kālaloḥa, those of kānta are romaka, bhrāmaka, cumbaka and drāvaka (77–95). Somadeva gives an account of the purification of iron and its killing, the uses of iron and its bhasman, and the disorders caused by impurities (96–130); half a verse only is devoted to maṇḍūra (127cd).²³⁹ Tin,²⁴⁰ its varieties, properties, purification and killing are dealt with, followed by a rasāyana formula (131–145). The verses on lead²⁴¹ describe its characteristics and properties, its purification, its killing by means of a special apparatus, called bhrāṣṭrayantra, and a rasāyana formula (146–161). Two varieties of pittala (brass)²⁴² are described, rīti(kā) and kākatuṇḍī,²⁴³ of which rīti is superior in quality; the purification, killing and liquefaction of rīti are dealt with, followed by a rasāyana formula (162–173). Kāṁsya (bronze)²⁴⁴ is said to be made from eight parts of copper and two parts of tin; its characteristics, properties, purification and killing are described (174–179). Varta(loha) or pañcaloha²⁴⁵ is an alloy of kāṁsya (bronze), arka (copper), rīti (brass), loha (iron) and ahijāta (lead);²⁴⁶ its purification and killing are dealt with (180–184ab).

The chapter proceeds with the preparation of bhūnāgasattva (186–197) and the properties of a finger ring (ūrmikā) of this material (198). The chapter ends with the preparation of aṅkolataila, its properties and its uses (199–229).

Chapter fifteen (72 verses) is concerned with the praise of mercury (2–3), its origin (4–13ab), the way of procuring it (13–15),²⁴⁷ the etymology (nirukti) of its names (16–20), the five doṣas (mala, viṣa, vahnī, mada, darpa) and seven kañcukas (bhū-, śaila-, jala-, tāma-, ayaḥ-, nāga-, and vaṅgasamudbhava) of mercury (21–27); a list of the eighteen saṁskāras and the opinions of a series of authorities on the purification of mercury (28–35); descriptions of the saṁskāras called svedana, mardana, mūrchanā (36–39), ways to remove the doṣas and kañcukas (40–49), the saṁskāra called rodhana (52–53), mukhakarāṇa (54), svedana again (55–56), saṁnyāsa (57–58), dīpana (59–61), the rākṣasavaktra of mercury (62–64), and some connected subjects (65–72).

Chapter sixteen (98 verses) is about the jāraṇā of abhraka (mica) and some other substances. The jāraṇā of abhrakasattva, resulting in pakṣaccheda of mercury, is the main subject (1–85);²⁴⁸ eight grāsas (doses of abhraka added to mercury) are described; additional subjects are biḍa (32), the form of mercury called daṇḍadhārin

(33–34), and chinnapakṣa mercury (44 and 75). The chapter ends with the jāraṇa of copper, iron and gold (86–98).

Somadeva frequently mentions his own name in his treatise;²⁴⁹ he also refers to particular chapters of his book (14.60; 15.57).

Several earlier authorities and other persons are referred to: Bhairava (6.3; 12.25 and 28),²⁵⁰ Bhāluki (15.33 and 54),²⁵¹ Bhāskara (15.32),²⁵² Brahmajyotiṣa (5.61),²⁵³ Devasūnu (14.199),²⁵⁴ Dineśvara (15.33),²⁵⁵ Girīśa (14.114),²⁵⁶ Govinda (15.34),²⁵⁷ Kharpaṇa (4.58ab),²⁵⁸ Manthānabhairava (1.44; 6.1),²⁵⁹ Mrgacārīn (4.96),²⁶⁰ Nāgārjuna (5.61; 11.91),²⁶¹ Nandikeśvara (14.58), Nandin (1.35; 5.56, 61, 77, 138; 14.128; 15.29, 35, 66),²⁶² Śambhu (8.27),²⁶³ Śiva (14.58), Somanātha (14.70),²⁶⁴ Śrīkaṇṭha (7.1),²⁶⁵ and Svachchandaḥairava (4.52).²⁶⁶

A number of verses of the *Rasendracūḍāmaṇi* are also found in the *Rasārṇava*.²⁶⁷

The *Rasendracūḍāmaṇi* is quoted in the prakīrṇaka parīṣṭa of the *Ānandakanda*, Narendranātha's *Capalanirṇaya*,²⁶⁸ Guṇrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Rasajalanidhi*,²⁶⁹ *Rasakāmadhenu*, *Rasamitra*, *Rasaratnākara*, *Rasaratnasamuccaya*,²⁷⁰ *Rasasindhu*, the commentary on the *Rasatarāṅgīnī*, the *Rasatattvavivecana*, *Rasayoga-sāgara*, *Ratnākaraśaḍhayogagrantha*, *Rasendrasambhava*, and Somadevaśarma's commentary on the *Āyurvedaprakāśa*. It was one of the sources of the *Āyurvedaprakāśa*, Hariśaraṇānanda's *Kūṭipakvarasanirmāṇavijñāna*, the *Pāradasaṁhitā* and Yādavjī's *Rasāmṛta*.

The *Ānandakanda* contains many verses which are also found in the *Rasendracūḍāmaṇi*. The *Rasendracūḍāmaṇi* has at least two verses in common with the *Dhanvantarī-nighaṇṭu*.²⁷¹

Somadeva is cited in the commentaries by Āsubodha and Nityabodha Senagupta, Hazārīlāl Sukul, and Khare on the *Rasaratnasamuccaya*, in Somadevaśarma's commentary on the *Āyurvedaprakāśa*, and in the *Rasaprakāśasudhākara*.

The *Rasaratnasamuccaya* mentions Somadeva as one of the Rasasiddhas.

The *Rasendracūḍāmaṇi* is a rasaśāstra work that had much influence on later treatises. The *Rasaratnasamuccaya* reproduces a large number of its verses; the lists of divyaśaḍhis and rasaśaḍhis are, for example, also found in the *Rasaprakāśasudhākara*.

Special features²⁷²

Mercury is said to cure diseases arising from the three doṣas when combined with gold, pitta diseases when combined with silver, kapha and vāta diseases when combined with copper, the various kinds of śūla when combined with iron, blood diseases when combined with lead, and meha when combined with tin (1.34). A stray verse of chapter one describes the plant called vṛścikālī (1.48). Four śaktis are distinguished: Mālīnī, which gives hemaśakti, Vajriṇī, giving longevity, Kāntā, giving hema- and lohasiddhi, and Abhrā, which gives bandha of mercury (2.23–24). The verses on the construction of a maṇḍala²⁷³ mention ten Dūtīs (female messengers), associated with Śiva, whose names are Lepikā, Kṣepikā, Krāmāṇī, Rañjikā, Lohaṇī, Bandhinī, Bhūcarā, Mṛtyunāśinī, Vibhūti, and Khecari (2.28–29).

Some implements that should be available in an alchemical laboratory are: kaṭatrā-
nī,²⁷⁴ kṣudrakṣipra, kṣurapa,²⁷⁵ pālikā, and kaṇṇikā;²⁷⁶ three types of strainer (cālīnī)
are described (3.6–20ab).

Technical terms explained in chapter four are: dhānavantarabhāga,²⁷⁷ rudrabhā-
ga,²⁷⁸ kajjali,²⁷⁹ rasapaṇka,²⁸⁰ navanītapīṣṭī,²⁸¹ pīṣṭī,²⁸² pātanapīṣṭī,²⁸³ hema- and
tārakṣṭī,²⁸⁴ varaloḥa,²⁸⁵ svarṇarakṭī,²⁸⁶ tārarakṭī,²⁸⁷ candra- and analadala,²⁸⁸ sita-
and pītadala,²⁸⁹ lohanāga,²⁹⁰ śulbanāga,²⁹¹ piñjarī,²⁹² candrārka,²⁹³ nirvāpaṇa or ni-
rvāhaṇa,²⁹⁴ vāritara,²⁹⁵ rekhāpūrṇa,²⁹⁶ apunarbhava,²⁹⁷ niruttha,²⁹⁸ bīja,²⁹⁹ tāḍana,³⁰⁰
dhānyābhraṇa,³⁰¹ sattva,³⁰² ekakoliśikha,³⁰³ śikhitra,³⁰⁴ hīṅgulākṣṭa,³⁰⁵ ghoṣākṣṭa-
tāma,³⁰⁶ guhyānāga,³⁰⁷ varanāga,³⁰⁸ utthāpaṇa,³⁰⁹ dhāṇa,³¹⁰ capala,³¹¹ dhautā,³¹²
dvandvana,³¹³ anuvāṇa,³¹⁴ bhañjini,³¹⁵ pataṅgī,³¹⁶ phalikā,³¹⁷ pataṅgīrāga,³¹⁸ āvāpa
(also called pratīvāpa and ācchādāna),³¹⁹ nirvāpa or snapana,³²⁰ śuddhāvarta,³²¹
bījāvarta,³²² svāṅgaśīta,³²³ bahiḥśīta,³²⁴ svedana,³²⁵ mardana,³²⁶ mūrchanā,³²⁷ naṣṭa-
piṣṭa,³²⁸ utthāpaṇa,³²⁹ pātana,³³⁰ rodhana,³³¹ niyamana,³³² dipana,³³³ grāsamāna,³³⁴
jāraṇa,³³⁵ cārāṇa,³³⁶ druti,³³⁷ biḍa,³³⁸ rañjana,³³⁹ sāraṇa,³⁴⁰ vedha,³⁴¹ udghāṭana,³⁴²
svedana, and samṇyāsa.³⁴³

The samṣkāra called krāmaṇa³⁴⁴ is not described in chapter four, but referred to
as krāmaṇa in chapter eight (8.31–33) and as parikramavidhi in chapter fifteen (15.
28). Some samṣkāras are, differently worded, dealt with again in chapter fifteen, while
chapter sixteen is devoted to the samṣkāra called jāraṇa.

The yantras described in chapter five are: dolā,³⁴⁵ khalva,³⁴⁶ valabhī,³⁴⁷ ū-
rdhvaṇṇapātana-, adhaṇṇapātana-, tiryakpātana-,³⁴⁸ kacchapa-,³⁴⁹ antarālīka-,³⁵⁰ tāpikā-,
pratigarbha-, garbha-,³⁵¹ pālikā-,³⁵² ghaṭa-,³⁵³ iṣṭikā-,³⁵⁴ vidyādhara-,³⁵⁵ damaru-
ka-,³⁵⁶ nābhi-,³⁵⁷ grasta-,³⁵⁸ tulā-,³⁵⁹ sthālī-,³⁶⁰ koṣṭhikā-,³⁶¹ vāluka-,³⁶² lavaṇa-,³⁶³
dhūpa-,³⁶⁴ kuṇḍa- or svedana-,³⁶⁵ dhekī-,³⁶⁶ somānala-,³⁶⁷ and nālikāyantra.³⁶⁸ Un-
usual yantras are those called grasta-, pratigarbha- and tāpikāyantra. A bhrāṣṭrayantra
(14.149) and kandukayantra (14.229) are occasionally referred to by Somadeva.

The types of mūṣā (crucible) described by Somadeva are: vajramūṣā,³⁶⁹ yogamū-
ṣā,³⁷⁰ vajradrāvaṇamūṣā,³⁷¹ gāramūṣā,³⁷² varamūṣā,³⁷³ varṇamūṣā,³⁷⁴ rūpyamūṣā,³⁷⁵
biḍamūṣā,³⁷⁶ vrntākamūṣā,³⁷⁷ gostanīmūṣā,³⁷⁸ mallamūṣā,³⁷⁹ pakvamūṣā,³⁸⁰ golamū-
ṣā,³⁸¹ mahāmūṣā,³⁸² mañjūsamūṣā,³⁸³ and muśalamūṣā.³⁸⁴

The types of koṣṭhī³⁸⁵ are: āṅgarakoṣṭhī,³⁸⁶ pātālakoṣṭhī,³⁸⁷ gārakoṣṭhī,³⁸⁸ and
tiryakpradhamakoṣṭhī.³⁸⁹ A prakāṭakoṣṭhī is once referred to (4.97).

The puṭas³⁹⁰ described are: mahāpuṭa,³⁹¹ gajapuṭa,³⁹² vārāhapuṭa,³⁹³ kukkuṭapu-
ṭa,³⁹⁴ kapotapuṭa,³⁹⁵ govarapuṭa,³⁹⁶ bhāṇḍapuṭa,³⁹⁷ vālukaṭapuṭa,³⁹⁸ bhūḍharapuṭa,³⁹⁹
and lāvakaṭapuṭa.⁴⁰⁰

The descriptions of the sixty-four divyauśadhis of chapter six are important and
have influenced later authors. The group consists of: akṣīrā, aparṇā, atasīvallikā,
bhṛṅgavallī, bhūtakaśī, bhūtumbinī, bilvinī, bodhilatā, brāhmaṇī, camarikā, cāṇḍālī,
chattrīṇī, citravallī, devadālī, gandharvī, gomārī, gonasā, gorocanalatā, goṣṭhī, īśvarī,
kākinī, karasīvallikā, karavīralatā, karīrī, kṛṣṇalatā, kṣīravallī, kūrṃmalatā, kuṭajavallī,
lambinī, laṣunavallī, mādhanvī, madyagandhā, mahānāgī, mahauśadhi, mahauśadhi,
maṇḍūkatalikā, mrakṣaṇagandhinī, mūlakandā, munivallī, nāginī, nimbukīlatā,
pattavallī, pītavallikā, raktāṅgī, raktavallī, rohiṇī, rudantikā, saptapattī, sarpiṇī,

somakalā, somavallī, somavṛkṣa, sthalapadminī, tāmraavallikā, tilakandā, tridaṇḍī,
triśūlī, uccaṭā, udumbaralatā, vajravallī, vārāhī, vijayā, viśālā, and vyāghrapādī.⁴⁰¹

The sixty-eight rasauśadhis of chapter seven, listed without being characterized,
are: ajamārī, alambuṣā, aparājītā, ardhacandrā, bhāṅgī, bhṛṅgī, brhatī, candrodakā,
ciñcī, citrapādī, dhanvayāsaka, durgandhā, garuḍī, gojihvā, guḍūcī, halinī, hamsapā-
dikā, hemapuṣpī, hīriṇī, īśvarī, jalakumbhī, jalamūlakā, jalāpāmārga, jalapippalī,
jālīnī, jalotpala, kākamācī, karmasphoṭī, kāsmarī, kukkuṭī, mālārjuna, māmsī, mā-
ṇḍūkī, meghanādī, mohinī, mūrvā, muśālī, nandinī, pāgava, pāṣāṇī, pātālā, paṭolī,
potakī, rasā, sadacitrikā, samāṅgā, sārīvā, sarpākṣī, śaṭī, śikhīpādī, śīśikā, sitaga-
ndhinī, sthalaprasarīṇī, sukanāsikā, tiktakā, tulasī, tuṣāmbu, uttamā, vajrakandikā,
vanakūṣmāṇḍavallī, vanamālā, vārāhī, vāsā, veṇukā, vidārī, viṣā, viṣaghnī, and
vṛścikālī.

The forty-six plants belonging to the sarpākṣyādigaṇa are: ākhukarnikā, āmalakī,
anantā, bhṛṅgarāja, brahmadāṇḍikā, dviparnī, ekaparnī, gojihvā, jalabimbī, jambukī,
jvālīnī, kākamācī, kapotī, kokilākṣa, kṣīriṇī, kukkuṭajāṅghā, kuraṅginī, kuraṇṭaka,
mahābālā, maṇḍūkarnikā, matsyākṣī, meghanādā, meṣaśṛṅgī, mūrvā, nāgabālā,
nīlī, padmacārīṇī, pāṭhā, phaṇī, prapunnāta, punarnavā, rāsnā, sahadevī, samāṅgā,
śarapūṅkhā, sarpākṣī, śatāvartī, śikhaṇḍinī, śvetādrīpārnīkā, śyāmapārnīkā, titṭīḍī,
triparnī, tripatrā, tulasī, vandyakarkoṭī, and viṣṇukrāntā (8.1–8ab).⁴⁰²

The eighty-four plants of the vyāghrikādigaṇa are: ajamārīkā, āṅganāyakī, arkapu-
ṣpikā, bākucī, bhūṣuṇḍī, brahmarañjaka, brhatī, cakrikā, cāṇḍālī, dantikā, devadālī,
ekavīrā, gajakarnikā, gojihvā, hamsapādikā, hanūmantī, hemalī, hilamocaka, jagatī,
kākaṇḍā, kākatuṇḍī, kañcukī, kaṇḍuṇī, kañkatī, kāravellī, karkoṭī, kārpāsī, kā-
samārī, kaṭutumbikā, keśinī, koṭarākṣī, kṛṣṇadhātūrā, kṛṣṇākṣīva, kumārī, kumbhinī,
lakṣmī, lāṅgalī, mahākālī, mālīkā, māyūra, meghapuṣpī, meṣaśṛṅgī, nāgavallikā,
nāginī, narajīvā, narakasā, padmacārīṇī, paṭolikā, putrajīvīkā, rākṣasī, raktacitrā,
raktasnuhī, rasanīrjīvakārī, rudantī, śākhota, saktukā, saktuśṛṅgī, śambarā, śamī,
śāṅkhaṇḍī, śaṭkārī, sitāṅkola, somavallārī, śṛgālajīhvīkā, sūryabhaktā, śvetaguñjā,
śvetārka, tuvaravallī, uccaṭā, vahni, vahnimardanī, vahnimārī, vajrīṇī, vanapīluka,
viśālā, vṛkṣarāja, vyāghranakṣī, vyāghrapādīkā, vyāghrī, vyāghrikā, yajñavallikā, and
yavaciñcā (8.9cd–20).⁴⁰³

The forty plants of the raktasnuhyādigaṇa consist of: āṅgaravallikā, arkapattī,
barhikā, brahmadāṇḍī, cukra, drumajyotis, hemavallārīkā, jīmūta, jyotiṣmatī, kā-
kamācī, kāladāṇḍī, kṣāṇḍodumbarīkā, krauñcīkā, kṣīrakukkuṭī, kṣīramārjārī, lāṅgalī,
mohinī, nāgajīhvā, nāgakaṇṭhī, nāgakarnī, nīlajyotis, nīlīkā, raktāgni, raktasnuhī,
rudantī, śākhōṭī, śāṅkhaṇḍīkā, somavallikā, sthalapadminī, tāmraavallārī, tridaṇḍī
(mentioned twice), triparnī, triśūlā, tṛṇajyotis, uccaṭā, udumbarī, varā, vartulaparnā,
and vṛddhadārū (8.21–28).⁴⁰⁴

The kadyalyādigaṇa consists of drāvaṇī, kadālī, kākamācī, kaṭukoṣṭakī, kṣīraka-
ñcukī, nīrapippalikā, śīgrukā, sūryabhaktā (8.29–30).⁴⁰⁵ The kākamācyādigaṇa com-
prises arjunī, arkapattī, brāhmī, carā, hamsapādī, kākamācī, kāravallī, kāsamarda, kṛ-
tāñjali, kṣīranālikā, kuruvaka, lakṣmaṇā, meghadhvani, nāginī, sahadevikā, tāmbūlī,
vārāhakarnīkā, and vyālīkā (8.31–33).⁴⁰⁶ The bhūpātalyādīvarga is made up of bhū-
pātālī, hemavallī, mārkaṇḍā, nāgadhārī, paṭolī, śīṃhavallikā, śūkārī, and yogārī (8.45–

46ab). The pañcaratnakagaṇa is composed of indīvarī, kaṅkālakhēcārī, mantrasīmḥāsānī, niśācarī, and pāṭalā (8.46cd–47).

The viṣavarga of chapter nine consists of kālakūṭa, pīta, sāktuka, śṛṅgika, and vaṭsanābha (9.11).⁴⁰⁷ The upaviṣavarga consists of arka, jayā, kanaka, karavīra, lāṅgalī, nīlaka, and viṣamuṣṭī (9.13).

Chapter ten (10.61) mentions, like the *Rasamañjarī* and *Rasaprakāśasudhākara*, eight varieties of vaikrānta.

The sādharmaṇarasas of chapter eleven form a new group, not mentioned under this name in earlier treatises.

The connections between the nine gems and the nine grahas, as found in the *Rasendrācūḍāmaṇi*, disagree with those mentioned in a number of other treatises (12.1–2).⁴⁰⁸

Chapter fourteen employs the term ariloha (14.15ab), without explaining it.⁴⁰⁹ A verse from the same chapter (14.29) asserts that tin, when it touches Rāma's sandals, turns into a kind of silver that cures all diseases. The variety of tīkṣṇaloha called tārapaṭṭa is mentioned (14.80), but not described.

The minor gems (uparatnas), poisons (viṣa) and minor poisons (upaviṣa) are not dealt with as to their purification, properties, uses, etc.; the viṣas and upaviṣas are simply listed (9.11–14).

A complete list of the eighteen saṃskāras of mercury is found in chapter fifteen only (15.28).

Some noteworthy plant names are adrī (9.23), barbūra (14.66 and 143), barbūrī (11.77), karpūragandhinī (9.23), and krūravallī (9.26).

Important is the description of the process by means of which varanāga is prepared from a mixture of nīlāñjana (stibnite) and tīkṣṇaloha (4.52cd–53ab). The verse shows that the process by which antimony (varanāga) is obtained was known in India much earlier than in Europe.⁴¹⁰

The author

The author, who was a Hindu,⁴¹¹ as shown by the maṅgalas (1.1–2), addressed to Śiva and Rāma, calls himself Soma (2.1), Somadeva, and Devasūnu (14.199). He was a son of a mantrin called Nārāyaṇa⁴¹² and was of mahāvīravamṣa (2.1).⁴¹³ Somadeva himself (15.66) and the colophons add that he was an important person (pati, varapati, puravarapati)⁴¹⁴ at Śrīkaravālabhairavapura (vara).⁴¹⁵ V. Śukla⁴¹⁶ suggested that this may be the name of a village donated to Somadeva by the king whom he served as a minister; Siddhinandana Miśra⁴¹⁷ regards it as the name of a city (śreṣṭhanagarī) or the capital (rājadhānī) of some small kingdom. V. Śukla expressed as his opinion that Somadeva may have been a vaiśya, as indicated by the name of the vamṣa to which he belonged. The same author brought forward that he may have been born in Rājasthān and that he settled in Gujārāt or Kāthiāvar later in life.⁴¹⁸

Somadeva was a person of wide learning; he states himself that he was an expert in śāstra and śāstra, Nyāya, Sāṃkhya and Vedānta (nayanagūṇavidhī, satpramāṇa, sāṃkhya, sānta), rasaśāstra and medicine (vaidyavidyā) (2.1).

A work called *Rasendraparibhāṣā* is attributed to Somadeva by G. Hāldār, who also

asserts that Somadeva revised Vāgbhaṭa's *Rasaratnasamuccaya*, and that he collaborated with his teacher Acyuta in writing a joint work, the *Raseśvarasiddhānta*.⁴¹⁹

Date

The reference to Govindabhaṅgavanta indicates that the *Rasendrācūḍāmaṇi* is posterior to the *Rasahrdaya*. The profuse quotations from Somadeva's work in the *Rasaratnasamuccaya* prove that the latter treatise is later.

An important clue to Somadeva's date is provided by the *Rasasindhu*, which mentions the *Rasendrācūḍāmaṇi*. This piece of evidence points to a period before the third quarter of the fourteenth century for the composition of the *Rasendrācūḍāmaṇi*.

The *Rasendrācūḍāmaṇi* is usually placed in the twelfth or thirteenth century.⁴²⁰

Chapter 12

*Rasendramaṅgala to Rasopaniṣad*The *Rasendramaṅgala*

The *Rasendramaṅgala* by Nāgārjuna¹ is an important and very interesting early treatise. Confusion concerning this work was created by Prafulla Chandra Rāy, who based his studies on the text of the Jammu MS, catalogued as the *Rasaratnākara* of Nāgārjuna; probably he was already aware of the problems caused by this MS, which gives *Rasendramaṅgala* as the title in some of the colophons, but the one who first drew attention to the confusion of the so-called *Rasaratnākara* of Nāgārjuna with the *Rasendramaṅgala*² was P. Cordier.³

A number of Indian scholars also noticed the identity of the so-called *Rasaratnākara* with the *Rasendramaṅgala* and commented on the remarkable fact that all the verses from the *Rasaratnākara* MS in *P.C. Rāy's 'A History of Hindu Chemistry' and P. Rāy's 'History of Chemistry' form part of the *Rasendramaṅgala*. Explicit notice of this may have been given first by Durgāśamkar Kevalrām Śāstrī in his *'Āyurvedno itihās' (1942).⁴ Atrideva Vidyālamkāra's references to this discovery⁵ were repeated by later Indian authors.⁶

The jumble concerning the *Rasendramaṅgala* was definitely clarified by D. Wujastyk,⁷ who also pointed to the close relationship between Nāgārjuna's *Kakṣapuṭa* and the *Mantrakhaṇḍa* of Nityanātha's *Rasaratnākara*.

Contents⁸

The *Rasendramaṅgala* consists of about 400 verses, arranged in eight chapters.⁹ The Paris and Bombay manuscripts have the following four chapters: (1) *rasoparasaśodhanādhikāra*, (2) *vajramāraṇasattvapātanaḥbrahmadidrutidrāvaṇalohamāraṇādhikāra*, (3) *bhasmasūtaka*, (4) *guṭikāsattvadrutijalūkāmāraṇādirasabandhana*.

The treatise opens with a maṅgala addressed to Śrīvardhamāna-Jīneśvara and the author's teachers, followed by a eulogy of mercury, which bestows Śiva's bliss and enables one to reach the other shore of the ocean of transmigration (*saṃsārasamudratāra*). The title of the treatise that will be exposed (*Rasendramaṅgala*) and the name of its author (Nāgārjuna) are mentioned.

The next verses (3–5) summarize the contents of the eight chapters of the treatise, now called *Rasamaṅgala* (6): (1) the purification (*śodhana*) of the *rasas*, *uparasas* and *lohas*, (2) the killing (*māraṇa*) of *vajra*, etc., and liquefaction (*drāvaṇa*) of all the *dhātus*, (3) *rasabandha*, (4) the preparation and application of pills (*guṭikāvidhi*), (5) the treatment of all the diseases, caused by *vāta*, etc., (6) the preparation of diverse per-

fumes (*citragandhayukti*) and ointments (*añjana*), (7) a treatise on poisons (*viṣatantra*), (8) groups of substances (*gaṇa*).

A long series of stanzas in praise of mercury and the physician with expertise in its application (7–17) precedes the section of chapter one that deals with processes (*saṃskāra*) making mercury fit for therapeutic and alchemical uses.

The five natural blemishes (*naisargikadoṣa*) of mercury are *mala*, *viṣa*, *vahni*, *gurutva* and *cāpalya*, the two *aupādhika* impurities (*doṣa*) arise from tin and lead. These *doṣas* cause particular disorders and should therefore be removed (18–20). The eighteen *saṃskāras* are referred to and enumerated: *saṃsvedana*, *mardana*, *mūrchana*, *utthāpana*, *pātana*, *dīpana*, *niyamana*, *rodhana*, *cāraṇa*, the two kinds of *druti*, *jāraṇa*, *grāsapramāṇa*, *rañjana*, *saṃsāraṇa*, *krāmaṇa*, *vedha*, and *yoga* (21–23). The purificatory processes (26–31) and the first eight *saṃskāras* are dealt with (32–39).

The second part of chapter one is devoted to the purification of some *rasas* and *uparasas*¹⁰ (40–48): *rājāvarta*, *rasaka*, *darada*, *mākṣika*, *manaḥśilā*, *tāla*, *abhraka*, *vajra*(?), and *vaikrānta*.¹¹ The last part of the chapter is about the purification of metals and alloys (*loha*; 1.49–64): *śulva* (copper), *hema*n (gold), *tāra* (silver), *āra* (brass), *ghoṣa* (bronze), *tikṣṇa* (iron), *nāga* (lead), and *vaṅga* (tin).¹²

Chapter two gives an account of the killing and liquefaction of diamonds (*vajra*) and *vaikrānta* (1–17), the extraction of the essence (*sattvapātana*) of mica (*abhraka*), *mākṣika*, *tāla*, *rājāvarta*, *vimala* and *abhraka*,¹³ and the liquefaction (*drāvaṇa*, *druti*) of metals and gems.¹⁴ The chapter ends with verses on the killing of metals.¹⁵

Chapter three contains a series of *rasas* to be used in the treatment of diseases: *svacchandabhairava*, *tikṣṇamukha*,¹⁶ *śulva*,¹⁷ *saṃdhānabhairava*, *śaśanagarbha*, *kāntavallabha*,¹⁸ *jayamaṅgala*,¹⁹ *vaḍavāmukha*,²⁰ *siddhasūtaṭṭi*,²¹ *sarvājīrṇahara*,²² *gandhakāḍya*, *meghanāda*,²³ *hamsanāda*, *nāgendra*,²⁴ *ravagendra*(?), and *mṛgāṅka*.²⁵ The preparation of mercurial bhasman of various colours is described, together with their medicinal²⁶ and alchemical uses. A few stray verses are about the seven varieties of *vaikrānta*: white, red, yellow, blue, grey like a pigeon, coloured like a peacock's throat, and green like an emerald. Recipes containing *vaikrānta* are also given.²⁷ The chapter goes on with a description of the *garbhayantra* and the preparation of mercurial bhasman, followed by verses extolling the effects of the bhasman, if properly used.

The remaining part of chapter three consists of *rasayogas* again: *saṃkocagolaka* (two formulae),²⁸ *candraprabha*,²⁹ *parpatī*, *pramarda*...(?), *sūryaprabha*, *pañcāṅgī*, *lañkeśvara*, *māṇikyakhanda*, *krusteśvara*, *pratāpalañkeśvara*, *saṃkocapiṣṭikā*,³⁰ *kanakasamkoca*, *gaganāḍya*,³¹ *tikṣṇamukha*,³² *ghanagarbha*,³³ a *piṣṭikā*,³⁴ *pratāpalañkeśvara*,³⁵ *madātyayahara*,³⁶ *bhasmasūtaka*, *śulvacūrṇa*, *rasarāja*,³⁷ *mahārāsa*, *gandhamardana*,³⁸ *pratāpa*, *gandhajaka*(?), *gaganamukha*, and *dviṇendra*;³⁹ some recipes, concerned with the preparation of a particular bhasman or *piṣṭikā*, are not provided with a name.

Chapter four begins with the description of a mercurial preparation (*mahārāsa*) used in the transmutation of base metals (*lohavēdha*) and in *dehavēdha*; ten varieties of *saṃkalā* are characterized.⁴⁰ The next part is concerned with the preparation of pills (*guṭikā*) with the following names: *vajrāṅgasundarī*,⁴¹ *amarasundarī*,⁴² *arkādi*, *hemabaddha*,⁴³ *mākṣika*,⁴⁴ *vyāghrī*, and *vaikrāntaguṭikā*.⁴⁵

A section on the bandha (solidification) of mercury follows. Types of bandha characterized are: kṛṣṭa-, sajīva-, piṣṭikā-, druti-, saṃkala-, and jalūkābandha. Three sizes of the jalūkā are mentioned: eight aṅguli for women called bāla, ten aṅguli for women called yuvati, and twelve aṅguli for women called pragalbā. Four varieties of such a jalūkā are described; they are employed as female aphrodisiacs, to be put into the vagina.⁴⁶

The next part of chapter four deals with prescriptions which suppress ejaculation (vīryastambha) and facilitate luring women (drāvaṇa). One formula is called kāmāṅkuśarasa.⁴⁷ Prescriptions increasing the size of the penis in men and of the breasts in women, etc., are also found in this part of the chapter.

Chapter four proceeds with a section devoted to jāraṇa and other saṃskāras, employed in aurification. The *Kakṣapūṭa* and an authority called Nāgabuddhi are mentioned.

The section that follows is very important in presenting the great Siddha Nāgārjuna, expounding his alchemical doctrines on the sacred mountain Śrīśaila to Ratnaghoṣa,⁴⁸ who asks for instruction in the arts of aurification and rasāyana. Nāgārjuna, complying with this request, relates that these arts were revealed to him by the Vāṭayakṣiṇī, propitiated after twelve years of penance. King Śālivāhana, who dedicated treasures of gold and gems to the Yakṣiṇī, is represented as having approached her too, eager to learn about alchemy.⁴⁹

The Vāṭayakṣiṇī declares that she is going to set forth the methods of aurification developed by Māṇḍavya and his pupil Vasiṣṭha, laid down in the *Vasiṣṭhamāṇḍavyaśāstra*, a treatise explained to her by her teacher. She transmits Māṇḍavya's views on transmutation, followed by an exposition on rasabandhana.⁵⁰

Ratnaghoṣa appears again on the scene, asking Nāgārjuna questions on rasāyana and dehasiddhi. Nāgārjuna gives an exposition on these subjects;⁵¹ one of the procedures explained is called bhūtakālāntakabandha. Ratnaghoṣa wants to know how dehasiddhi can be attained if one is unable to perform the bhūtakālāntakabandha. Nāgārjuna teaches him an alternative method, called khecarabandha, in which jāraṇa of gems is an essential process. If this bandha is successfully performed, Śiva himself will make his appearance, praising the expert alchemist and promising him a long life in heaven, accompanied by the enjoyment of the daughters of Rudra, Viṣṇu and Brahmā.

The last part of chapter four gives the characteristics of śuddha, baddha, mṛta and murchita mercury;⁵² the six types of solidified (baddha) mercury are described: kṛṣṭa-, pada-, jalūka-, bhasma-, mūrti- and murchitabaddha. The chapter ends with a concise exposition on the saṃskāras.

The general contents of chapters five to eight are known from the references in the short table of chapter one. Chapter five, on the treatment of diseases, is referred to in chapter three.⁵³ The commentary (tippana) on the *Rasendramaṅgala* explains some parts of chapter five, dealing with the treatment of vātavyādhi, atisāra and kuṣṭha. It probably also mentions the gandhayukti section of chapter six.

The list of apparatus at the end of the Jammu MS of the so-called *Rasaratnākara* of Nāgārjuna⁵⁴ actually forms part of the tippana on the *Rasendramaṅgala*. This list⁵⁵ enumerates the following yantras: śilā-, pāṣāṇa-, bhūdhara-, vaṃśa-, nalikā-,⁵⁶

gajadanta-, dolā-, adhaḥpātana-, bhuvaḥpātana-, pātana-, niyāmaka-, gamana-,⁵⁷ tulā-, kacchapa-, cākī-, vālūkā-, agnisoma-, gandhakatrāhika-,⁵⁸ mūṣā-, kamabhājana-,⁵⁹ ghoṇa-⁶⁰ gudābhakra-,⁶¹ nārāyaṇa-, jālikā-,⁶² and cāraṇayantra-;⁶³ a haṇḍikā also forms part of the list.

The *Rasendramaṅgala* is quoted or referred to in the *Bhāvaprakāśa*,⁶⁴ Caturbhūja's commentary on the *Rasaḥḍaya*, the *Kūpīpakvarasanirmānavijñāna*, *Rasakakṣapūṭa*, *Rasasindhu*, *Rasatattvavivecana*, *Rasayogasāgara*,⁶⁵ *Rasendrasambhava*, and *Ṭoḍara's* *Āyurvedasaukhyā*.⁶⁶

Some verses of the *Rasendramaṅgala* form also part of the *Rasārṇava*⁶⁷ and Vāgbhaṭa's *Rasaratnasamuccaya*.⁶⁸

Formulae from the *Rasendramaṅgala* occur in the *Basavarājīya*,⁶⁹ in Kāśinātha's *Cikitsākramakalpalavallī*,⁷⁰ Narapati's *Narapatījayacaryā*,⁷¹ the *Rasacandāmsu*,⁷² *Rasakalpatā*,⁷³ *Rasakāmadhenu*,⁷⁴ *Rasarājasundara*,⁷⁵ *Rasaratnākara*,⁷⁶ *Rasaratnakau-mudī*,⁷⁷ *Rasaratnasamuccaya*,⁷⁸ *Rasārṇava*,⁷⁹ *Rasāvatāra*,⁸⁰ *Rasendracintāmaṇi*,⁸¹ *Rasendrakalpadruma*,⁸² *Rasendraratnakośa*,⁸³ *Rasendrasārasaṃgraha*,⁸⁴ *Vaidyacinatāma-ṇi*,⁸⁵ and *Yogamahārṇava*.⁸⁶

The author⁸⁷

The *Rasendramaṅgala* mentions Nāgārjuna as its author in one of the introductory verses. The colophons attribute the work to Nāgārjuna too. In spite of this, it appears doubtful that the famous Siddha Nāgārjuna wrote the work, because stories about him are told in chapter four. The *Rasendramaṅgala* was more probably composed by some unknown author in a period in which tales about the colourful personality of the alchemist Nāgārjuna were already current.⁸⁸ The *Kakṣapūṭa*, usually ascribed to Nāgārjuna, is mentioned in the *Rasendramaṅgala*. An authority called Nāgabuddhi, known as one of the Rasasiddhas, figures in the treatise as the discoverer of a rasa that transmutes one hundred times its amount of base metal into gold; he is represented as inspired by Buddhist doctrines.⁸⁹

The religion of the author was apparently of a syncretistic type.⁹⁰ The introductory verses pay homage to Vardhamāna-Jineśvara and Śiva; the deity Prajñāpāramitā figures in the formula of tūkṣṇamukharasa. Deities of the Hindu pantheon are frequently mentioned: Bhairava, Brahmā, Caturbhūja, Gaṇanātha, Janārdana, Kālī, Pārvaṭinātha, Viṣṇu, etc.

The Kāpālikas were known to the author.⁹¹ The *Brahmayāmala* is referred to as the source of the formula called vajrāṅgasundarīvaṭī.⁹²

Date

The *Rasendramaṅgala* is often thought to be a very early work, dating from the seventh, eighth or ninth century.⁹³ Its attribution to Nāgārjuna is rarely put into question.

As already pointed out, it is hardly credible that Nāgārjuna was the author of the work. Its chronological position depends for that reason on internal evidence and quotations from it in later works. The quotations in the *Rasasindhu* prove that the *Rasendramaṅgala* is earlier than the third quarter of the fourteenth century.⁹⁴ The upper limit is conditional upon the date of the Nāgārjuna and the king called

Śālivāhana who figure in chapter four, and the stories about these persons.

Atrideva⁹⁵ was convinced that the *Rasendramaṅgala* is posterior to the eleventh or twelfth century, because the vālukāyantra was known to its author.⁹⁶ This argument can be disregarded, for the list of yantras forms part of the commentary and does not belong to the treatise itself.

Commentary

The commentary (tippana) on the *Rasendramaṅgala* consists of short explanations concerning the alchemical procedures described in the text. Many names of plants are elucidated by means of synonyms.

The tippana on chapter two contains a list of yantras.⁹⁷ The section of chapter four in which Nāgārjuna, Ratnaḥṣa and Śālivāhana figure is not commented upon.

The comments on chapter five have partly been preserved and the section on gandhayukti of chapter six is referred to.

The last three parts of the tippana are concerned with subjects which are not listed in the table of contents of chapter one. These parts are about metals, in particular iron (loha), and the use of metallic preparations for rasāyana purposes. The commentator remarks that Nāgārjuna distinguished eighteen kinds of loha, enumerated and discussed by him. The names of these types can be reconstructed by help of a passage from Āḍhamalla's commentary on the *Śāringadharasamhitā* where they are listed and also said to derive from Nāgārjuna. Their names are: māṇḍūra, māṇḍūka, sāra, madhyasāra, sthūlasāra, cakramarda, bandha, vajraka, surāyasa, kaliṅga, bhadra, garaḷa, sthita, vajra, pāṇḍinirava, arbudaka, kānta, and kuliśa.⁹⁸

The tippana on the part describing loharasāyanas mentions the four periods of a man's life: bāla, kumāra, yuvan, sthavira.

The opening lines of the tippana state, after a maṅgala, addressed to Śiva, that its author studied the opinions of twenty-seven Siddhas, various sciences, *Nighaṇṭus*, the *Vaidyakatrāya*, and the regional names of plants.

The names of the twenty-seven Siddhas are those found in the *Rasaratnasamuccaya*, which is not mentioned as a source.

The name of the author of the commentary remains unknown. A commentary on which no details are available is attributed to Govindacandra.⁹⁹

The Rasendrapurāṇa

The *Rasendrapurāṇa* was written by Rāmaprasāda.¹⁰⁰

Contents

The work consists of 2,655 verses, arranged in thirty chapters (adhyāya). It is written in the form of a dialogue between Śiva as a teacher and Vīrabhadra as his pupil.

Chapter one (126 verses) introduces the subject of the book: rasavidyā; it describes its divine origin (5–30)¹⁰¹ and praises the wonderful properties of mercury (31–59). The names of mercury are enumerated (60–61), Śiva's abode in the Himālaya is described (62–71), and an account is given of the mythical origin of mercury (72–78).

Five varieties of mercury are distinguished and their properties described (79–88). These five kinds are: rasa, rasendra, sūta, pārada and miśraka.¹⁰²

Chapter two (nānābhavivecanīya; 218 verses) is about technical terms (10–37), weights and measures (38–50), the types of puṭa (51–66), and the yantras (67–218).

Chapter three (pāradasaṃskāravarṇana; 329 verses) begins with the construction of the rasalinga and its pūjā. The eight mahādoṣas or naisargikadoṣas and the seven kaṇḍukas are dealt with (6–15). The rasaśālā is described (17–21). The saṃskāras are listed: the series of eighteen (31–32), the eight saṃskāras employed for medicinal purposes (33; quoted from the *Rasapaddhati*), and a less usual series of nineteen (35). The eight saṃskāras which result in a purified mercury, suitable to medicinal use, are described (39–88). The process called anuvāsana is added (89). Mercury is said to be completely purified if one-eighth of the original quantity remains (90). The preparation of mercury from cinnabar is dealt with (91–94), followed by the purification of mercury by means of the taptakhalva (95–96), and the mukhakarāṇa and pakṣacchedana of purified mercury (97–104). Several methods of preparing the form of mercury called candrodāya, a substance used as a drug, are described (120–151).¹⁰³ Other subjects of chapter three are kṣetrīkaraṇa (152–156), the preparation of rasasindūra (157–169), the varieties of rasabhasman (170–179), the preparation of rasakarpūra (187–207), the sabīja and nirbīja bandha of mercury (208–209), the twenty-five or twenty-six varieties of bandha (210–249), the sixty-four divyauśadhis (238–246), gandhakajārāṇā (258–292), and the formulae of a number of pills (guṭikā; 300–328).¹⁰⁴

Chapter four (pāradamāraṇakriyāvarṇana; 99 verses) gives information on the killing of mercury (1–26); the remaining part of the chapter is devoted to rules about the use of mercurial ashes and the treatment of disorders caused by injudicious use. Chapter five (hīṅgulasindūravārṇana; 48 verses) describes cinnabar (hīṅgula), its purification and killing (1–36ab), as well as sindūra and its purification (36c–48); three varieties of hīṅgula are distinguished: carmāra, śukatuṇḍaka and haṃsapāda (6–7). Chapter six (gandhapāṣāṇavarṇana; 56 verses) is concerned with sulphur (gandhapāṣāṇa), its mythical origin, properties, purification, and medicinal uses.

Chapter seven (gaganavarṇana; 196 verses) is about mica (abhraka = gaganā). Subjects dealt with are: the mahārasas (2), the mythical origin of mica (6–10), its varieties and their properties (11–22), the harmful effects of impure mica (25–26), its purification (27–29), the preparation of dhānyābhraka (30–33), ways of killing it (34–87), abhrakabhasman and its amṛtikaraṇa (98–116), the extraction of abhrakasattva (118–140),¹⁰⁵ its purification (141–142), killing (143–160) and druti (161–176), and finally the uses of mica and its products (180–195).

Chapter eight (haritālaprakaraṇa; 176 verses) describes the mythical origin of haritāla (3), its varieties (4–9), properties (11) and purification (14–21); various ways of killing it (22–146) and several ways of extracting its essence (156–168) are dealt with; the chapter ends with the medicinal uses of haritāla. (169–175). Chapter nine (añjanakāśisagairikavarṇana; 44 verses) gives an account of añjana (3–21), kāśisa (22–37) and gairika (38–43), their varieties, purification and sattvapātana.

Chapter ten (uparasavarṇana; 78 verses) is concerned with the uparasas, their varieties, properties, purification and medicinal uses. The extraction of the essence of tuvarī

is described (23), as well as the killing and the extraction of the essence of manahśilā (40–45), and the killing of varāṭikā (65).

Chapter eleven to seventeen are devoted to the seven metals (dhātu), their origin, varieties, properties, purification, killing, druti and medicinal uses. Chapter eighteen describes maṇḍūra and chapter nineteen the alloys.

Chapter twenty to twenty-six are concerned with a series of upadhātus, their origin, names, varieties, properties, purification, killing, and medicinal uses. If relevant, the extraction of the sattva is described, and, occasionally, the killing and dravaṇa of the essence.¹⁰⁶ The upadhātus dealt with are: svarnamākṣika (chapter twenty), tāmākṣika (chapter twenty-one), vimāla (chapter twenty-two), tuttha (chapter twenty-three), capala and kaṅkuṣṭha (chapter twenty-four), rasaka (chapter twenty-five), and śilājatu (chapter twenty-six).

Chapter twenty-seven gives an account of the eight sādhanārasas, their names, properties, etc. Chapters twenty-eight and twenty-nine are about the nine ratnas and the uparātnas, their names, varieties, properties, killing, etc. Precious stones dealt with are: vajra (28.35–134), pravāla (28.135–150), mauktika (28.151–183), marakata (28.184–190), vaidūrya (28.192–196), gomeda (28.197–200), māṇikya (28.201–204), nīla (28.205–212), and puṣparāga (28.213–217). Chapter thirty describes the viṣas and upaviṣas, their names, properties, purification, uses, etc.

Sources are occasionally referred to: *granthāntara* (6.10–12), *Purandararāhasya* (3.255), *Rasadarpaṇa* (25.18), *Rasapaddhati* (3.33; 25.19), *Rasārṇava* (17.7), *Rasasindhu* (3.285–287), and *Ṭoḍarānanda* (25.28).

Authorities mentioned are: Bhāluki (24.19), Caraka (1.11), Hārīta (1.11), Nāgārjuna (3.76; 25.17), Suśruta (1.11), and Vāgbhaṭa (1.11; 24.20).

A large number of the verses of the *Rasendrapurāṇa* may have been composed by the author. Part of the verses have been taken from sources not referred to, for instance, the *Rasasamketakalikā*,¹⁰⁷ *Rasaratnasamuccaya*,¹⁰⁸ and *Rasendrasārasaṃgraha*.¹⁰⁹

The *Rasendrapurāṇa* is quoted in the *Rasendrasambhava*. The author of the latter work often quotes from the *Rasendrapurāṇa* without indicating his source.¹¹⁰

Special features

The *Rasendrapurāṇa* is a treatise on iatrochemistry, which explains that it describes the eight saṃskāras which render mercury suitable to medicinal purposes. The other saṃskāras, which are necessary for deha- and lohasiddhi, are not dealt with. The medicinal properties and uses of alchemical products are systematically taken into consideration.

The naisargikadoṣas of mercury are: asahyāgni, cāñcalya, giri, mala, nāga, raṅga (= vaṅga), vahni, and viṣa (3.6); the names of the seven kañcukas are: andhakāṇi, bhedī, dhvāṅkṣī, drāvī, malakāṇi, parpaṭī, and pāṭalī (3.10). The list of eighteen saṃskāras comprises svedana, mardana, murchana, utthiti, patana, rodha or bodha, niyāmana, saṃdīpana, gaganabhakṣaṇamāna (= abhṛakagrāsamāna), saṃcārāṇa, garbhadruti, bāhyadruti, jāraṇā, grāsa, sārāṇa, saṃkrāmaṇa, vedha, and śarīrayoga¹¹¹ (3.31–32). A slightly different series of nineteen items is also mentioned; this series adds anuvāsana and replaces grāsa by rañjana (3.35). The forms of mercury called āroṭaka,¹¹² candrodya, baddha and mṛta are defined; mercury is designated as āroṭaka

when it is still able to move about (cala), as candrodya when it has assimilated sulphur; it is baddha when able to withstand the fire,¹¹³ and it is a bhasman or mṛta, when killed (3.38–39). The twenty-five or twenty-six types of bandha are anonymously quoted, probably from the *Rasaratnasamuccaya*; another classification into four types is also recorded: poṭa- or parpaṭikā-, khoṭa- or piṣṭī-, jalaukā- or pakva-, and bhasmabandha (3.250–251).¹¹⁴ Two types of rasabhasman are described: ūrdhvaga- and talabhasman;¹¹⁵ rasakarpūra and rasasindūra belong to the former type (3.252–254).

The eight mahārasas are: abhra, vaikrānta, mākṣika, vimāla, adrija, sasyaka, capala and rasaka (7.2). The rasas are: mercury, sulphur, mica, haritāla, añjana, kāsisa and gairika (7.4).

Haritāla is of two or four varieties; the two varieties are patrākhyā and piṇḍa, the four varieties are piṇḍa, patra, godanta and vakadāla (8.4–9). Añjana is of two types: yāmuna and kāpota (9.2), or five types: sauvīra, rasāñjana, sroto'ñjana, puṣpāñjana and nīlāñjana (9.4–10); rasāñjana is described as either pītacandanāniryāsa or dārvīkvātha (9.6 and 16); kulatthāñjana is added (9.17–18). Kāsisa is of three varieties: white, śyāma and yellow; the yellow variety is called puṣpakāsisa or taijika (9.22–24); according to another opinion, kāsisa is of two varieties, called vālūkā- and puṣpakāsisa (9.25–26). Two varieties of gairika are described: pāṣāṇagairika and svarṇagairika (9.39–40).

The uparāsnas are: ṭaṅkaṇa (10.7–14), tuvarī (10.16–28),¹¹⁶ manahśilā (10.30–49), śaṅkha (10.51–55),¹¹⁷ khaṭī (10.56–58), varāṭikā (10.59–68),¹¹⁸ śukti (10.69–72), śāmbukā (10.73–74), and sikatā (10.75–77).¹¹⁹ Three varieties of ṭaṅkaṇa are described: sphāṭikābha, guḍaprabha and pāṇḍura or nīlakaṇṭha, two varieties of tuvarī: sphāṭikā and chillikā or phullatuvārī,¹²⁰ three varieties of manahśilā: śyāmāṅgi, karavīrikā and dvikhaṇḍākyā, two varieties of khaṭī: khaṭī and gaurakhaṭī.

The seven metals (dhātu) are gold, silver, copper, tin, zinc, lead and iron (11.1). The chapter on copper includes verses on bhūnāga (13.41–54) and the sattva of mayūrapiccha (the tail feathers of the peacock; 13.54). Two varieties of zinc (yaśada or kharpara) are distinguished: yaśada and śavaka (15.2). Three types of the bhasman of lead are mentioned: harit, vidyudābhāsa and sindūra (16.20–25). Three types of iron are described: muṇḍa, tīkṣṇa and kāṇṭha (17.3). Muṇḍa is of three varieties: mṛdu, kuṇḍa and kāṇḍāra, tīkṣṇa of six varieties: kharasāra, hottāla, tāraṇaṭṭa, viḍa, kālaloḥa, and gajākhyā; kāṇṭha is of four varieties: romaka, bhrāmaka, cumbaka and drāvaka, but the *Rasārṇava* is reported to describe a fifth variety, called karṣaṇa (17.4–7). Gajākhyaloḥa is not described; instead, vajraloḥa and its ten varieties are mentioned: asita, kāla, lohākhyā, rakta, lohita, vajraka, māyūravajraka, tittiravajraka, rohiṇivajraka, and śukavajraka (17.19–20). Five varieties of romaka are referred to: ekāsya, dvimukha, vedāsya, śaṅkhacakra, and sarvatomukha (17.24). A type of loḥa added is called pāṇḍyaloḥa (17.26). The alloys (mīśrakadhātu) described are kāmśya and pittala (19.2–22), pañcaloḥa (19.23–25), and vartaloḥa (19.26).

Two series of upadhātus are enumerated; the first series consists of mākṣika, tuttha, abhra, nīlāñjana, śilā, ālaka and rasaka, to which vimāla is sometimes added as the eighth item; the second series comprises suvarṇamākṣika, tāmākṣika,¹²¹ tuttha, kāmśya, pittala, sindūra and śilājatu (20.2–3). Vimāla is dealt with in one of the chap-

ters (twenty-two) on the upadhātus; three varieties are distinguished: hema-, tāra-, and kāmśyavimāla (22.2–4); its sattva is described as white and resembling candrārka (22.10–13). Two varieties of tutha are described: sasyaka and kharpara (23.2–4); its sattva is indragopākṛti and the same as copper (23.13–14). Capala is described in one of the chapters on the upadhātus (twenty-four), although some regard it as a mahārāsa or uparāsa (24.5). The same chapter deals with kaṅkuṣṭha, two varieties of which are distinguished: nalika and reṇuka (24.16–18); Bhāluki is referred to, who considers kaṅkuṣṭha to be an upadhātu of tin (vaṅga) (24.19). The identity of rasaka is discussed (25.1–15); its sattva resembles tin (25.33). The sattva of śilājatu is described as resembling iron (26.53). Soraka is regarded as a variety of śilājatu (26.54–56).

The sādhanārasas are kāmpilla, capala, gaurīpāṣāṇa, naraśāraka, kapardī, vahni-jāra, girisindūra, and kedāraśṛṅga (27.2–3). Gaurīpāṣāṇa is of two varieties: an artificial variety, white in colour, and a yellow one, occurring naturally (27.8). The chapter on the sādhanārasas also deals with samudraphena (27.40–41), bola (27.42–47)¹²² and guggulu (27.48–58); kapardī, girisindūra and kedāraśṛṅga are not discussed.

Nine ratnas are listed: vajra, vidruma, mauktika, marakata, vaidūrya, gomedaka, māṇikya, harinīla, and puṣpadṛṣad (28.5). The ratnas are also divided into four uparatnas and five maharatnas (28.6). The maṇis consist of vaikrānta, sūryakānta, hīraka, mauktika, candrakānta, rājāvarta, garuḍodgāraka, puṣparāga, mahānīla, padmarāga, pravālaka, vaidūrya and nīla (28.8–9). Rājāvarta, puṣpa, mauktika, vidruma and vaikrānta belong to the group of maṇirasas (28.10). Eight sources (yoni) of pearls are enumerated: śukti, śaṅkha, the elephant, boar (kṛda), serpent, frog and bamboo (veṇu) (28.151); clouds (megha) are added to this series (28.165–167); pearls from Persia (pārasikodhava), Arab countries (bābarā) and the West (rūmajasambhava) are described too (28.168).

Uparatnas described are: vaikrānta (29.6–32), sūryakānta (29.38–39), candrakānta (29.40–41), rājāvarta (29.42–51), piroja (29.52–53), and sphāṭika (29.54–58). Seven or eight varieties of vaikrānta are mentioned (29.10–14).

Eighteen kandaviṣas are enumerated and discussed: binduka, cakra, hālāhala, hāridra, harita, kālakūṭa, kardama, markāṭaka, mayūrākhyā, musta, puṣkara, saktuka, śaṅkhanābha, śīkhī, śṛṅgī, sumaṅgala, vāluka, and vatsanābha (30.11–20). A division into eight saumya and ten ugra poisonous substances is quoted; the eight saumya types are: dāraka, kaurima, mustaka, saikata (= vāluka), saktuka, sārṣapa, śvetaśṛṅgī, and vatsanābha (30.21–24). Lists of thirteen (30.32–33) and nine poisonous substances (30.38) are also cited; the series of thirteen consists of: hālāhala, haridraka, kālakūṭa, kardama, karkāṭa, mahāviṣa, mūlaka, mustaka, saktuka, sārṣapa, śṛṅgaka, vāluka, and vatsanābha; the series of nine viṣas comprises brahmaputra, haridra, hālāhala, kālakūṭa, pradipana, saktuka, saurāśṭrika, śṛṅgaka, and vatsanābha.¹²³

Two series of upaviṣas are enumerated. The first series (30.16) consists of āphūka (= ahiphena), arka, guñjā, hayārī, jaipāla, lāṅgalī, snuhī, unmatta, and viṣamuṣṭika; the second series (30.161–162) is composed of ahiphena, bhallātaka, dhattūra, guñjā, karavīra, khākhasa, lāṅgalī, nirviṣī, and viṣamuṣṭi. Vijayā and sehuṇḍa are also described as upaviṣas (30.184–185).¹²⁴

The sixty-four divyauśadhis listed (3.238–246) are: somavallī, jalasthapadmiṇī,

ajagarī, gonasī, trijaṭā, īśvarī, bhūtakeśinī, kṛṣṇavallī, rudravantī, vārāhī, sarvarā, aśvatthapattī, amlapattī, cakranāsā, aśokikā, punnāgapattī, nāgā, kṣetrikā, śavarī, devīlātā, vajravallī, citrakā, kālaparṇikā, nīlotpalī, rajanī, palāśatilakā, śimhikā, go-ṣṭhāṅgī, khadirapattī, tṛṇajyotiṣ, raktavallī, brahmadandī, madhutṛṣā, padmakandā, hemadandī, vijayā, ajayā, jayā, nalī, śrīnāmī, kīṭamārī, tumbikā, kaṭutumbī, mayūra-śikhā, hemalatā, āsurī, saptaparnī, gomārī, pītākṣīrikā, vyāghrapādalatā, dhanurvallī, trīśūlīnī, śṛṅgī, tridandī, vajravallārī, mahatī, raktakandavatī, bilvadalā, rohiṇī, gorocanā, bilvatāṅgī, kandapattīkā, viśalyā, and kandakṣīrā.¹²⁵

The plants, plant products, and other substances belonging to the abhramakā-rakagaṇa are: agni (= citraka), agnimantha, ambhakumbhī (= jalakumbhī), anantā, anilārī, ārdra, aśvagandhā, bhārgī, bhṛṅgarāja, bilva, cow's urine, dāḍima, devadālī, devadāru, dhātūrī, dhattūra, dūrvā, goat's blood, guḍūcī, haritakī, indrayāṇī, kākamācī, kali, kapittha, kāravī, kāsamarda, kaṭu, kharamaṇjarī, kimpūka, koṣṭakī, kumārīkā, kumbhī, liṅgī, lodhra, maṇḍūkapaṇikā, marīcaka, mīnākṣikā, muni, mūṣakapaṇī, mustā, nāgavallī, nata, the two parṇis (i.e., śāliparṇī and pṛṣṇiparṇī), pāṭalikā, puna-rnavā, rambhā, the milky juice of ravi (= arka), śaṅkhapuṣpī, saptaparnaka, śatāvārī, siddhārthaka, tailapaṇī, tālamūlī, tālisapattī, tiktā, tinduka, trikaṇṭa, vajrī, vartākinī, the milky juice and the young shoots of vaṭa, vijayā, vṛndā, and vṛṣa (7.88–92).¹²⁶

Some noteworthy names of plants are: āmrāharidrā (8.151), gaṅgātīrīyā (8.99), hu-lhula (8.131), and pītāpuṣpī (8.132).

The author

Rāmaprasāda, born in 1874 or 1875, was a rājavidyā of Paṭiyālā, where he founded an Āyurvedic College. He also wrote the *Āyurvedasūtra* and Hindī translations of the *Carakasamhitā* and *Aṣṭāṅgahṛdaya*.¹²⁷ Rāmaprasāda was the father of Shiv Sharma.

Date

The first volume of the *Rasendrapurāṇa* was completed in 1926 or 1927.

The Rasendrasambhava

The *Rasendrasambhava* by Viśvanātha Dvivedī¹²⁸ is a treatise that mainly deals with iatrochemistry.

Contents

The treatise consists of 4,162 verses, arranged in five chapters (prakaraṇa) and a pari-śiṣṭa.

Chapter one (paribhāṣyaprakaraṇa; 460 verses) is preceded by a maṅgala and some verses enumerating and praising the originators (pravartakāḥ) of āyurveda; the chapter itself deals with technical terms (paribhāṣā); it lists the components of a large number of groups of substances derived from āyurveda and rasaśāstra; added are the properties of the tastes, rules concerning pharmaceutical preparations, definitions of alchemical terms, descriptions of several types of mūṣā, puṭa and yantra.

Chapter two (śodhanamāraṇādi prakaraṇa; 806 verses) is divided into five sections

(adhikāra). Section one (rasoparasādhikāra; 2.1–230) is concerned with mercury (1–66) and the uparasas: cinnabar (hīṅgula; 70–77), rasakarpūra (78–84), sulphur (gandhaka; 85–91), mica (abhraka; 92–122), manaḥśilā (123–132), haritāla and godantiharitāla (133–160), dugdhapāśāṇa (161–167), kampilla (168–169), tuvaṛī or sphatikā (170–172), ṭaṅkaṇa (173–180), śilājatu (181–195), bola (196–202), saurāṣṭrī (204), khaṭī (205), gairika (206–210), and capala (211–230). The varieties, properties and purification of these substances are described, and, where appropriate, their killing (māraṇa), the extraction of their essences (sattvapātana), etc.

Section two (dhātūpadhātavadhikāra; 2.231–524) gives an account of the seven metals (dhātu): gold (232–252), silver (253–266), copper (267–292), iron (293–334), zinc (335–355), lead (356–371), and tin (372–391), followed by verses on kāmasya (392–399), pittala (400–406), maṇḍūra (407–417), and the seven upadhātus: mākṣika (425–451), vimala (452–458), tuttha (459–472), kāntapāśāṇa (473–481), rasaka or kharpara (482–492), añjana (493–497), and kaṅkuṣṭha (498–505); added to the upadhātus are: sindūra (506–509), kāsīsa (510–516), narasāra (517–518), soraka (519–520), agnijāra (521–522), and samudraphena (523–524). The varieties, properties and purification of these substances are discussed, and, where appropriate, their killing, the extraction of their essences, etc.

Section three (ratnaparatnādhikāra; 2.525–630) is about the nine ratnas: vajra (527–547), māṇikya (548–554), puṣparāja (555–558), tārkṣya (559–562), nīla (563–566), vaidūrya (567–570), gomeda (571–574), vaikrānta (575–580), and vidrūma (581–593), followed by the uparatnas: sphatikā (597–599), sūryakānta (600–604), candrakānta (605–607), peroja (608–609), rājāvarta (610–614), raktapāśāṇa (615–618), vyomāśman (619–622),¹²⁹ ṭṛṇakānta (623–624), kolopala (625–627),¹³⁰ and viṣamuktā (628–630). The purification and killing of these precious and semi-precious stones are described, together with their properties.

Section four (mauktikopamauktikādhikāra; 2.631–654) discusses pearls (mauktika; 631–640), and the group called upamauktika (641–654), their varieties, properties, purification, killing, etc.; the upamauktikas are the shells called śukti, śaṅkha and kaṇḍaka.

Section five (viṣopaviśādhikāra; 2.655–806) deals with poisonous substances of mineral, vegetable and animal origin, their varieties, properties, purification, etc.; the treatment of poisoning by these substances is also described. A poisonous mineral discussed is gaurīpāśāṇa, also called malla (657–664). The vegetable poisons are divided into viṣas and upaviṣas. The group of nine viṣas consists of halāhala, kālakūṭa, brahmaputra, pradīpana, saurāṣṭrika, haridra, śṛṅgaka, saktuka, and vatsanābha; the eleven upaviṣas are viṣamuṣṭi, unmatta (= dhātūra), agni (= bhallātaka), jaipāla, guñjā, jayā (= bhaṅgā), āphūka (opium), snuḥī, arka, hayamāra (= karavīra), and lāṅgalī (665–741). Verses are added about the purification of the seeds of vṛddhadāraka, eraṇḍa, nimbū, dantī, indravaruṇikā, karañja, and a series of other plants and medicinal substances of plant origin (742–757). The remaining part of the chapter is devoted to poisons of animal origin.

Chapter three (rasaprakaraṇa; 1,606 verses) is a collection of rasayogas against the diseases described in the *Mādhavanidāna*; the author added a number of disorders

found in later treatises.

Chapter four (kuppīpakvarasaparpatīlauhaprakaraṇa; 619 verses) is divided into five sections (adhikāra), the first three of which deal with kuppīpakvarasas.¹³¹ Section one (rasasindūrādhikāra; 4.1–49) gives an account of the preparation and the properties of a series of sindūras: rasa-, svarṇa-, tāra-, tāmrā-, nāga-, vaṅga-, abhra-, tāla-, śilā-, malla-, and viṣasindūra. Section two (makaradhvajādhikāra; 4.50–84) is devoted to the preparation of a number of varieties of makaradhvaṇa and its medicinal properties. Section three (anyakuppīpakvarasa; 4.85–123) is concerned with the preparation and medicinal uses of candrodāya, kāmadevarasa, anaṅgasundararasa, svarṇavaṅga, and rasakarpūra. Section four (parpatīkādhikāra; 4.124–224) deals with the preparation and medicinal actions of a number of parpatīs: rasa-, pañcāmṛta-, prāṇada-, vijaya-, lauha-, tāmrā-, svarṇa-, ratnaparpatī, and some preparations of the same type. Section five (lauhaprakaraṇa; 4.225–619) describes a large number of metallic preparations (lauha) against diseases which are arranged in the same way as in chapter three, but with a smaller number of new syndromes added to those of the *Mādhavanidāna*.

Chapter five (sahapānānupānāpathyāpathyaprakaraṇa; 622 verses) begins with definitions of sahapāna and anupāna (5.1–11); the whole chapter is devoted to descriptions of these drinks, to be taken together with a drug (sahapāna) or after its ingestion (anupāna).¹³² Verses on what is wholesome (pathya) or unwholesome (apathya) in a particular disorder are added.¹³³ The arrangement of the diseases is the same as in chapter three again. Some verses containing information on the author are appended to chapter five.

The pariśiṣṭa chapter (vaṭīprakaraṇa; 42 verses) contains a number of recipes for pills called vaṭī.

Sources mentioned by the author in the bhūmikā to the edition of his work are: *Bhaiṣajyaratnāvalī*, *Bhāvaprakāśa*, *Bhelasamhitā*, *Cakradatta*, *Caraka*,¹³⁴ *Dhanvantari*, *Gadanigraha*, *Harita*, *Rasacandāmśu*, *Rasahṛdaya*, *Rasakāmadhenu*, *Rasakautūhala*, *Rasamañjarī*, *Rasarājasundara*, *Rasaratnākara*, *Rasaratnapradīpikā*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasatantrasāra*, *Rasataraṅgiṇī*,¹³⁵ *Rasāyanasāra*, *Rasayogasāgara*, *Rasendramaṅgala*, *Rasendrasārasaṃgraha*,¹³⁶ *Śārṅgadhara*, *Suśruta*, *Vāgbhaṭṭa*,¹³⁷ *Vaṅgasena*, *Yogacintāmaṇi*, *Yogaratanākara*, and *Yogatararaṅgiṇī*.

Additional sources are the *Rasendracūdāmaṇi*¹³⁸ and *Rasendrapurāṇa*.¹³⁹

Special features

The originators of āyurveda, both the prāṇacāryas and the Rasasiddhas, listed in the introductory verses are: Agasta, Agniveśa, Atri, Bhairava, Bhallukī, Bhāskara, Bhela, Brahmā, Caraka, Dhanvantari, Gahanānanda, Gorakha, Govinda, Kākaṇḍīśvara, Kapālika, Laṅkeśa, Māṇḍavya, Manthānabhairava, Matta, Nāgabodhi, Nāgārjuna, Nandin, Naravāhana, Narendra, Pāpina, Ratnakośa, Śambhu, Śaṃkara, Śārṅgadhara, Suśruta, Svachchandaṭbhairava, Vāgbhaṭṭa, Viśārada, Viṣṇu, Vyādi, and Yaśodhana.

Noteworthy yantras described are: kavacīyantra (1.346–348), ṭaṅkayantra (1.372–373),¹⁴⁰ tejayantra (1.383–386),¹⁴¹ jalayantra (1.399–408),¹⁴² gaurīyantra (1.417–421),¹⁴³ bakayantra (1.441),¹⁴⁴ nāḍikāyantra (1.442–446),¹⁴⁵ and kandukayantra (1.454–457ab).

Eight naisargikadoṣas of mercury are enumerated: nāga, vaṅga, vahnī, mala, cā-

palya, garala, giri, and asahyāgni (2.3), and seven kañcukas: bhedī, drāvī, malakārī, dhvāṅkṣī, parpaṭikā, andhakārī, and pāṇikā (2.6). Eight saṃskāras are said to suffice for rasāyana purposes and described: svedana, mardana, mūrchana, utthāpana, the three varieties of pātana, bodhana, niyāmana, and pradīpana (2.17–59). Anuvāsana is not mentioned. Māraṇa (killing) and the properties of bhasman are dealt with in a few verses (2.60–63).

Fifteen uparasas are distinguished, divided into a superior and an inferior group. The ten superior uparasas are: darada (cinnabar), rasendu (= rasakarpūra), gandha (sulphur), abhra (mica), (manah)śilā, tālaka, dugdhapāśāṇa, kampilla, sphaṭika, and ṭaṅkaṇa; the five inferior uparasas are: śilājātu, bola, saurāṣṭrī, khaṭī, and gairika (2.67–68); capala is either regarded as a mahārasa or an uparasa (2.69).

Rasakarpūra is of two varieties; it is a product of mining (khanija) or made in the workshop (krīma) (2.78). Four varieties of sulphur are mentioned: red, yellow, white and black (2.85). Mica is of four colours: black, yellow, white and red; these types are called vajra, grāhika, tāra and bhīruka; the vajra type is subdivided into varieties called pināka, dardura, nāga and vajra (2.92–94).

Sixty-four drugs, mostly plants, used in the killing of mica, are listed (2.111–116). The preparation of abhrakasattva is not described. Manahśilā is of three varieties: śyāmāṅgi, karavīrikā and dvikhaṇḍā (2.123–125). Four varieties of haritāla are distinguished: piṇḍākhyā, patrasaṃjīka, godanta and vakadāla (2.133). Ṭaṅkaṇa is of three types: sphaṭikābha, guḍaprabha and pāṇḍura; the last type is also known as nīlakaṇṭha (2.173–174). Four kinds of śilājātu are described: suvarṇa-, rājata-, tāma- and āyasaśilājātu (2.181–183). Bola is of three kinds: rakta, śyāma and manuṣyaja (2.196). Two varieties of gairika are described: pāśāpagairika and svarṇagairika (2.206). Capala is of four colours: gaura, śveta, aruṇa and kṛṣṇa (2.211–214).

The three types of iron, muṇḍa, tīkṣṇa and kānta, are mentioned without any subdivision (2.293). Zinc (yaśada) is of two varieties: yaśada and śavaka (2.335). Lead (nāga) is of two kinds: kumāra and samala (2.356). Kāṃsya is of two kinds, called puṣpa and tailaka (2.393–394). Only two kinds of añjana are distinguished: sroto'ñjana and suvīraja (2.493). Two varieties of kañkuṣṭha are described: nalikākhyā and reṇuka (2.498). Kāsīsa is of two kinds: cūrṇa- and puṣpakāsīsa (2.510).

Noteworthy diseases mentioned in chapters three and five are: āhakajvara (3.203–206; 5.24–25), āmaśayaroga (3.340–341), amśughāta (3.1377–1379), aupasargikameha (3.944–946; 5.408), bahumūtra (3.952–974; 4.413–418), gadodvega (3.691–694), granthikajvara (5.22–23), kapharoga (3.846–859), klomaroga (3.977–979), ojomeha (3.947–948), pittaroga (3.860–864), pretajaroga (3.1604–1606), śīrṣāmburoga (3.1373–1376), somaroga (3.1405–1423; 5.615–617), urastoya (3.856–860), and vṛkkaroga (3.975–976).¹⁴⁶

The author

The author introduces himself in the granthakāraparicaya, appended to chapter five. His name is Viśvanātha Śarman, of a brāhmaṇa Dvivedin family, of Vatsagotra. His parents are Pārvaṭī Devī and Hanumān, who lived in the village Duvauliyā in the Naravanamaṇḍala, in the vicinity of Kāśī.¹⁴⁷

Date

The *Rasendrasambhava* was completed in 1952/53.¹⁴⁸

The *Rasendrasārasaṃgraha*

The *Rasendrasārasaṃgraha* by Gopālākṛṣṇa¹⁴⁹ deals with alchemy in the service of medicine and contains, in particular, a large number of rasayogas against various diseases.

Contents¹⁵⁰

The treatise consists of 2,167 verses, arranged in five chapters (adhyāya), and is based on earlier works.¹⁵¹

Chapter one (386 verses) deals with: the names and characteristics of mercury (7–9), its blemishes (10–12), and its purification (13–18); the taptakhalla (19); the aghoramantra (20);¹⁵² rasanigaḍa (21); the purification of mercury again (22–36); ūrdhvaḥpātana (37–38); adhaḥpātana (39–41); tīryakpātana (42–43); bodhana (44–46); mercury prepared from cinnabar (47–55); mūrchana (56–57); māraṇa (58–61);¹⁵³ rasasindūra (62–72); rasakarpūra (73–75); sarvāṅgasundararasa (76–81);¹⁵⁴ kṛṣṇabhasman (82–85);¹⁵⁵ the vajramūṣā (86–88); various groups of substances (89–108); the uses of mercurial products (109–113); the uparasas (114–115), their purification and killing: gandhaka (116–125),¹⁵⁶ vajra (127–134), vaikrānta (135–138),¹⁵⁷ abhraka (139–167),¹⁵⁸ tālaka (168–187),¹⁵⁹ (manah)śilā (188–193), kharpara (194–196), śikhitūṇḍa (= tuttha; 197–201), vimala (202–204), (hema)mākṣika (205–213),¹⁶⁰ kāsīśa (214–215), kāntapāśāṇa (216–219), varāta (220–224), añjana (225), hingula (226–231), gairika (235–237), śaṅkha (243–244), bhūnāga, ṭaṅkaṇa (238–242), and śilājātu (232–234); the purification of kañkuṣṭha is also dealt with in the verses on the uparasas (235–237); the purification of bhūnāga, although listed as one of the uparasas (114–115), is not discussed; the purification and killing of the metals and alloys (245–357): gold (245–258), silver (259–267), copper (268–278), brass (pittala) and bronze (kāṃsya) (279), lead (280–287), tin (288–295), iron (296–352), maṇḍūra (353–357); the purification and killing of gems (358–364); the purification of the major poisons (viṣa; 365–369),¹⁶¹ the minor poisons (370–371), and some other substances (jayapāla, snuḥikṣīra, the seeds of vṛddhadāraka, nimbu, rājavṛkṣa, etc.; 372–374 and 378–386); the purification of leeches (375–377).

Chapter two begins with a number of rasas which are effective against many diseases. The remaining part of chapter two, which is very long, consists of forty-nine sections, devoted to the treatment of one or more diseases, mainly with rasayogas.¹⁶² Chapter three contains rasas against children's diseases and chapter four against poisoning. Chapter five is devoted to rasāyana and vājīkaraṇa.

The order of the diseases agrees largely with the *Mādhavanidāna*, except for some additions.

Authorities mentioned in the *Rasendrasārasaṃgraha* are: the author of the *Candrikā* (1.74–75 and 76–81), Caraka,¹⁶³ the author of the *Rasamañjarī* (1.74–75), and Nāgārjuna (1.43).

The *Rasendrasārasaṃgraha* is quoted in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the *Āyurvedīya Khanijavijñāna*, the *Bhāvaprakāśa*,¹⁶⁴ the *Rasadhātuprakāśa*, Gulrajīśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hanumatprasāda Śarmā's commentary on the *Siddhabhaiśajyamañjūṣā*, Haridattasāstrin's commentary on the *Rasataraṅgiṇī*, Hariśaraṇānanda's *Kūpīpakvarasanirmānavijñāna*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, Jñārasarāmaśarman's *Anupānadarpaṇa*, the *Śāligrāmanighaṇṭhubhūṣaṇa*, Khare's commentary on the *Rasaratnasamuccaya*, the *Rasajalanidhi*,¹⁶⁵ the *Rasatattvavivecana*, Śivādāsasena's commentary on the *Cakradatta*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, and Yādavjī Trikamjī's *Siddhayogasamgraha*. It is one of the sources of the *Bheṣajasamhitā*, *Pāradasamhitā*, *Rasavidyāmahārṇava*, *Rasayogasāgara*, *Rasendrasambhava*, *Rasoddhātantra*, and Yādavjī Trikamjī's *Rasāmṛta*.

A number of verses of the *Rasendrasārasaṃgraha* are also found in the *Rasaratnākara*.¹⁶⁶

The *Rasendrasārasaṃgraha* is especially popular in Bengal.¹⁶⁷

Special features

The plants belonging to the *niyāmakagaṇa* are: ākhuparṇī, anantā, balā, brahmadandī, cakramarda, ghanadhvani, ghaṇṭā, girikarṇikā, gojihvā, jālinī, kākajaṅghā, kākamācī, kañcukī, karañjaka, kokilākṣa, kṣṇavarṇatulasī, kṣīrīṇī, mahābalā, maṇḍūkapaṇī, matsyākṣī, meṣāśṛṅgikā, mūrvā, nāgabala, nīlī, padmacāriṇī, pāthā, potikā, punarnavā, saharā, sahadēvī, śaṅkhapuṣpī, śarapūṅkhā, sarpākṣī, śatāvarī, śikhaṇḍīnī, simhī, tāmalakī, tripuṭī, vanyakarkoṭī, vighaṇṭā, viṣṇukrāntā, and yamacīñcīkā (1.89–93).¹⁶⁸

The plants and substances belonging to the *mārakavarga* are:¹⁶⁹ ākhuparṇī, arka, asanaka, balā, bhallātaka, bhekaparṇī, cakra, cāṇḍālīnī, candrarekhā, citraka, dantikā, devadālī, dhustūra, dūrvā, ghana, girikarṇikā, gokāṇṭaka, gokṣura, guḍūcī, haṃsapadī, hastiṣuṇḍikā, the two kinds of haridrā, harītakī, hiṅgu, indravāruṇikā, jāti, jayantī, kākajaṅghā, kākamācīkā, kañcukī, kanyā, karkaṭī, kaṭutumbī, kiṃśuka, koṣātakī, lajjā, lākṣā, lāṅgalikā, mahārāṣṭrī, māṇa, mārkava, matsyākṣī, mūrvā, muṣalī, nīpakaṇā, nirguṇḍī, the two kinds of punarnavā, rambhā, ravibhaktā, sahadēvī, saindhava, saraṇī, śarapūṅkhā, sarpākṣī, śatāvarī, śīgru, somalatā, suṇṭhī, śvetasarāpa, tīla, tulasī, vacā, vajravallī, vajrī, vandhyā, vārāhī, vargalatā, vāyasatuṇḍī, viṣamuṣṭī, viṣṇukrāntā, vyāghrapadī, and yamacīñcīkā (1.94–101).

The series of uparasas (1.114–115) is the same as that found in the *Rasaratnākara* (1.5.1–3). The extraction of the essences (sattvapātana) of the uparasas is not discussed. The only añjanas mentioned are nīlājñana (1.225) and sauvīra (1.235).

The plants comprising the *abhrakamārakagaṇa* are: ākhuparṇikā, arka, brhatī, hilamocikā, madana, maṇḍūkapaṇī, nāgavallī, punarnavā, tagara, taṇḍulīyaka, and tiktā (1.160).

The drugs belonging to the *triphalādigaṇa* are used in puṭapāka (1.319–322); their names are: auśadha, bhallātaka, bhekaparṇikā, bhṛṅga, citraka, the leaves of dāḍima, dantī, giriśāntanaka, gojihvā, hastikarṇapalāśa, kanda, kaṭukī, keśarājaka, khaṇḍitakarṇa, krāmaka, kulīśa, kuthāra, lohamāraka, māṇa, punarnavā, śataputrī, śṛṅgavera, tālamūlikā, tantra, triphalā, trivṛtā, viḍaṅga, vṛddhadāra, vṛṣapattraka, and

vṛṣcīra.

The eraṇḍādigaṇa (1.323–324) cures vāta disorders; this group consists of drākṣā, eraṇḍa, ketakī, māṣapaṇīnī, mudgaparṇī, prasāraṇī, śārivā, śīrīṣa, and vidārīkanda.

The kirātādigaṇa (1.325) is useful against pitta disorders; it consists of amṛtā, candana, jaṭā, kirāta, kustumburu, nimba, padma, paṭola, śālmali, śatāvarī, and uḍumbarī.

The śṛṅgaverādigaṇa (1.326–327), effective against kapha disorders, comprises arkapaṇa, kaṇṭakārikā, the two kinds of karañja, the seeds of kuṭaja, mūrvā, nirguṇḍī, paṭola, śīrīṣaka, śobhāñjana, the rhizome of śṛṅgavera, and varuṇa.

The gokṣurādigaṇa (1.328), employed against disorders caused by a combination of vāta and kapha, is made up of gokṣura, kṣuraka, the two kinds of simhapucchi, sthīrā, and vyāghrī.

The paṭolādigaṇa (1.329), which cures disorders caused by a combination of pitta and kapha, consists of aparājītā, indīvara, kahlāra, kāntā, kāsamarda, lodhra, the leaves of paṭola, uśīra, and vārāhī.

The kiṃśukādigaṇa (1.330–331) cures disorders brought about by the three doṣas, if the drugs are prepared by means of puṭapāka; the group is made up of agnimantha, bilva, brhatī, kaṇṭakārikā, kāśmarī, kiṃśuka, pāṭalā, śālaparṇī, the two types of simhapucchi, sthīrā, śyonāka, trikaṇṭaka, and viśva.

The śatāvaryādigaṇa (1.332), useful in vājīrkarma, consists of balā, bhṛṅgarāja, dhātṛī, gokṣura, guḍūcī, kaṇḍā, kṣura, śatāvarī, vānarī, vidārī, vājigandhā, and vṛddhadāraka.

The vidārīkandādigaṇa (1.333–335), useful for puṭapāka, consists of amṛtakā, bhallāta, bhṛṅgarāja, citraka, karikarṇapalāśa, keśarāja, kṣīrakañcuka, madhuka, muṣalī, muṇḍirī, piṇḍāhva, vidārīkanda, and śatāvarī.

Seven upaviṣas are enumerated: ahiphena, arka, dhustūra, guñjā, karavīraka, lāṅgalī, and sehuṇḍā (1.370).

Zinc is not mentioned as one of the metals.

Some unusual names of yantras mentioned are keśayantra (1.373) and raudrayantra (1.374).

Diseases added to those described in the *Mādhavanidāna* are: jvarātīsāra, samgrahagrahaṇī (grahaṇī 21), bhasmaka (ajīrṇa 100), śītavāta (vātavyādhi 56), kapharoga, pittaroga, somaroga and mūtrātīsāra,¹⁷⁰ plīhan, agramāṃsa and yakṛt,¹⁷¹ and snāyuka or tantukākhyā.¹⁷² Diseases omitted are vṛddhi, vidradhi, vraṇa, bhagna, and śūkadoṣa. Phiraṅga is not mentioned.

Interesting names of plants are: ākarakarabha (upadaṃśa 24), amlarolī (1.179; ajīrṇa 101), bhaṅga (grahaṇī 23), gandhālikā (sūtikā 28), kālā (amlapitta 24), kālamāriṣa (amlapitta 20), kañcaṭa (grahaṇī 19), khaṇḍakarṇa (grahaṇī 106; kāsa 3; śītapitta 8), manyumaṇī (udāvarta 1), nāgadā (jvara 100), nisindhu (jvara 100), raṇḍā (somaroga 10), and viṣakaṇṭhālikā (jvara 100).

A large number of the formulae are ascribed to (semi-)divine and other authorities.¹⁷³ Many prescriptions are also found in the *Rasendracintāmaṇi*.¹⁷⁴

The author

The author mentions his name, Gopālākṣṇa, in the introductory verses.¹⁷⁵

Date

The *Rasendrasārasaṃgraha* is later than the *Rasamañjarī* which is quoted. It would be earlier than the last quarter of the fifteenth century, the period of Śivadāsasena, if this commentator's single quotation from Gopālākṣṇa's work would prove to be genuine.¹⁷⁶ The *Rasendrasārasaṃgraha* antedates the *Bhāvaprakāśa* in P.V. Sharma's opinion, who claims¹⁷⁷ that the latter cites the former; this assertion, however, cannot be substantiated. Gopālākṣṇa's descriptions of the preparation of *rasasindūra* (1.62–72) and *rasakarpūra* (1.73–75) throw doubt on an early dating of the *Rasendrasārasaṃgraha* and may point to the fifteenth or sixteenth century as the period of composition.¹⁷⁸ The quotation from a rasaśāstra author called Mādhava in Gopālākṣṇa's auto-commentary even suggests, if the remark derives from the *Āyurvedaprakāśa*, that the work belongs to the eighteenth century.¹⁷⁹

Commentaries

Commentaries on the *Rasendrasārasaṃgraha*¹⁸⁰ were written by Gopālākṣṇa himself, Rāmasena, Jivānandavidyāsāgara, and Ambikādattaśāstrin.

An unspecified *Rasendrasārasavyākhyā* is quoted in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.

Gopālākṣṇa's auto-commentary is called *Bālabodhinī*.¹⁸¹ Gopālākṣṇa gives many details concerning the processes described in his treatise. Vernacular names of inorganic substances and plants are rather often mentioned. The sources of quotations are not specified in most cases.

The introductory verses indicate that a *ṭippanī*, called *Candrikā*, on the *Rasendrasārasaṃgraha* already existed at the time Gopālākṣṇa decided to write his auto-commentary.

Authorities and works quoted and referred to are: *Agniveśasaṃhitā* (1.114 = ed. i, 1.232–233), Bhaṭṭa (grahaṇī 14 = ed. i, 65–67; kuṣṭha 11 = ed. i, 26–33), *Candrikākāra* (jvara 89 = ed. i, 297–300),¹⁸² *Hārīta* (1.114 = ed. i, 1.232–233), Mādhava (jvara 89 = ed. i, 297–300),¹⁸³ *Mṛtyuñjayatantra* (1.120 = ed. i, 1.245–247), *Pātañjala* (1.151 = ed. i, 1.296), *Siddhasāra* (jvarātisāra 1–2 = ed. i, 1–4), Someśvara (jvara 4 = ed. i, 4–15; jvara 73 = ed. i, 219–221),¹⁸⁴ Śrīkaṇṭha (jvara 73 = ed. i, 219–221), and Vāgbhaṭa (1.114 = ed. i, 1.232–233).

The commentator Rāmasena, called Kavīndramāṇi,¹⁸⁵ was the court physician of Mir Jāfar, the Nawab of Bengal (A.D. 1757–1762); he also commented on the *Rasendracintāmaṇi*. Rāmasena is quoted in Jivānandavidyāsāgara's commentary.

Jivānandavidyāsāgara's commentary¹⁸⁶ quotes from and refers to: *Agniveśasaṃhitā* (1.233), *Arthabodhikā* (jvara 340),¹⁸⁷ *Atrisamhitā* (1.66, 127, 130), (Govindadāsa's) *Bhaiṣajyaratnāvalī* (śūlaroga 29–34; śitāpitta 8; bālaroga 8; rasāyana 54), Bhānudāsa (pittaroga 3), Bhaṭṭa¹⁸⁸ (grahaṇī 65; ajirṇa 79; kuṣṭha 47), Bhāvamīśra (1.64), *Bhāvaprakāśa* (kuṣṭha 47), *Cakradatta* (śoṭha 6), (Śivadāsa's) *Cakradattaṭīkā* (1.232), *Candrikākāra* (jvara 297), Caraka (unmāda 14), *Dīpikākāra* (jvara 340), *Hārīta* (1.233), Mādhava (jvara 297;¹⁸⁹ jvarātisāra 1),¹⁹⁰ *Mṛtyuñjayatantra* (1.245–247),¹⁹¹ *Nāgārjunī-*

yasiddhaprayogatantra (jvara 340–350), Nīścala (amlapitta 19–31), *Rājanighaṇṭu* (1.64 and 245–257), Rāmasena (1.65; śūla 4 and 65), *Siddhasāra* (jvarātisāra 1–2), Someśvara (jvara 2.4–15 and 219), Śrīkaṇṭha (jvara 219), *ṭīkā* (ślīpāda 2), and Vāgbhaṭa (1.233).

Jivānanda repeatedly mentions variant readings¹⁹² and vernacular, especially Bengali, names of plants.¹⁹³

Ambikādattaśāstrin's commentary¹⁹⁴ quotes from and refers to: *Bhaiṣajyaratnāvalī* (upadamaśa 5–21; rasāyana 65–74), *Bhāratānuśāsanika* (1.248), *Bhāvaprakāśa* (1.259, 279, 296, 326–327, 353–354, 372–373; kuṣṭha 47; masūrikā 1), *Cakra* (yonivyāpad 2), *Caraka* (gulma 2–3; kuṣṭha 48–57), *Jejjaṭācārya* (upadamaśa 1–2), *Kumāratantra* (bālaroga 6–12), *Manusamhitā* (1.248), *Māṭrkābhedaṇṭu* (1.248), *prācīnaṭīkā* (ślīpāda 1–6), *Rājanighaṇṭu* (1.296, 358), *Rasaratnasamuccaya* (1.126, 129–130, 168, 225, 232, 259, 296, 357, 358), *Rasatarāṅgiṇī* (1.49–50, 126, 140–145, 257–258, 353–354, 357, 380–386; ajirṇa 25–28; rasāyana 75–77), *Suśruta* (1.365; yakṣman 14–19; yonivyāpad 2), Vāgbhaṭa (1.365; yakṣman 100–107; hikkā-śvāsa 1–2), and Vāgbhaṭaṭīkā (pañḍuroga 50–52).

The *Rasoddhāratantra* or *Rasasaṃhitā*

The *Rasoddhāratantra* or *Rasasaṃhitā* is an iatrochemical treatise in Hindī prose and Sanskrit verse, composed by Carapaṭirṭha Mahārāja, i.e., Jivānandavidyāsāgara.¹⁹⁵

Contents

The work deals with the origin, symptoms and treatment (mainly by means of rasayogas) of diseases.

The *Rasoddhāratantra* is based on the following sources: *Aṣṭāṅgharḍaya*, *Āyurvedaprakāśa*, *Bhaiṣajyaratnāvalī*, *Bhāvaprakāśa*, *Brhannighaṇṭuratanākāra*, *Cakradatta*, *Caraka*, *Gadanigraha*, *Rasakāmadhenu*, *Rasaprakāśasudhākāra*, *Rasarājasundara*, (Nityanātha's) *Rasaratnākāra*, *Rasaratnasamuccaya*, *Rasendracintāmaṇi*, *Rasendrasārasaṃgraha*, *Śārngadharaśaṃhitā*, *Suśruta*, *Vaidyājīvana*, *Vaṅgasena*, *Vṛndamādhava*, *Yogaratanākāra*, and *Yogatarāṅgiṇī*. Additional sources referred to are the *Brhadyogatarāṅgiṇī* and *Yogaśataka*.

The treatise ends with the *bhasmapīṣṭiprakaṛaṇa* of a Sanskrit version of the *Rasoddhāratantra*, accompanied by some comments in Sanskrit.¹⁹⁶ This section is concerned with the preparation and medicinal uses of the bhasman and piṣṭi of the following metals, minerals and other substances: *akīka* (1–4), *abhraka* (5–18), *abhrakasattva* (19–28), *kāntapāśāṇa* (29–32), *kāntaloḥa* (33–47), *kāsīsa* (48–51), *kāsīsa* and *godantī* (52–54), *kukkuṭāṇḍatvac* (eggshells; 55–56), *kāṃsya* (57–62), *kharpāra* (63–66), *godantī* (67–69),¹⁹⁷ *gomeda* (70–73), *caturvaṅga* (74–79),¹⁹⁸ *jaharamoharā* (80–85),¹⁹⁹ *tāmra* (86–97), *tuttha* (98–100), *trivaṅga* (101–105),²⁰⁰ *ṭṛṇakāntamaṇi* (106–109), *nāga* (110–115), *indranīla* (116–129), *marakata* (130–142), *pittala* (143–148), *puṣparāga* (149–157), *pañcaloḥa* (158–167), *pravāla* (168–175), *vaṅga* (176–181), *mayūrapicchā* (peacock's feathers; 182–185), *gaurīpāśāṇa* (186–

192), māṇḍikya (193–199), māṅśikasattva (200–204), muktā (205–221), maṇḍūra (222–226), mṛgaśṛṅga (deerhorn; 227–234ab), yaśada (234cd–240), rajata (241–250), loha (251–255), lohābhra (256–259ab),²⁰¹ varāṭikā (259cd–265), vajra (266–272), vaikrānta (273–276),²⁰² vaidūrya (277–286), śukti (287–288), śaṅkha (289–294), saptaratna and navaratna (296–310), suvarṇa (311–315), svarṇamāṅśika (316–323), saṅgeyaśāba (324–327),²⁰³ sphāṭika (328–332),²⁰⁴ haritāla (333–334), and hīṅgula (345–349).

Sources quoted or referred to in this section are: *Āyurvedaprakāśa*, *Bṛhadyogataraṅgiṇī*, *Govindapādāḥ*, *Rasaprakāśasudhākara*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasatarāṅgiṇī*, and *Yogaratanākara*.

The Rasopaniṣad

The *Rasopaniṣad*²⁰⁵ is an anonymous alchemical treatise that is mainly concerned with the transmutation of base metals into gold and silver by means of processed mercury (lohasiddhi); rasāyana and dehasiddhi are important subjects in the last few chapters.²⁰⁶

The *Rasopaniṣad* is composed in the form of a conversation between Śiva and Pārvatī. The work may have formed part of a larger work, called *Mahodadhi*, unless *Mahodadhi* be an alternative title of the *Rasopaniṣad*.²⁰⁷

Contents

The *Rasopaniṣad* has been incompletely preserved,²⁰⁸ as appears from a table of contents found in chapter one (1.20–84), which gives an analysis of the contents of chapters one to eighteen, followed by information on the topics dealt with in chapters twenty-four to thirty; verses on chapters nineteen to twenty-three are missing. The edited part of the treatise consists of about 2,500 verses and some prose.²⁰⁹

Chapter one (rasakaraṇabandha; 119 verses) is concerned with śodhana, tejana, pācana, dāśana, cāraṇa, and pātana (which constitute the sixfold rasakarman), nigrāha, bandhana, aṅkuśa, pakṣaccheda, agnikarman, rasakriyā, rañjana, krāmaṇa, sāraṇa, pratisāraṇa, and saṃkarabandha.²¹⁰

The subjects of chapter two (rasavṛddhikaraṇa; 42 verses) are bandha and drāvaṇa,²¹¹ those of chapter three (sparśavṛddhikaraṇa; 30 verses)²¹² are sattvapātana, aṅkuśabandha, aṅkuśanipātana,²¹³ and sparśavedhiraśa.²¹⁴ Chapter four (bījavidhāna; 121 verses) deals with bījas and their uses in rañjana, with groups of substances (varga), and with the dīpikā(yantra).²¹⁵ Chapter five (vedhapātṭa; 14 verses) is concerned with the paṭṭabandha of mercury by means of jyēṣṭha- and madhyamabīja.²¹⁶ Chapter six (lohakaraṇa; 59 verses) discusses the sattvapātana of rasaka (6.3–19) and other substances: māṅśika, vimāla, śaila, capala, and sasyaka.²¹⁷

The subjects of chapter seven (rañjanakalkavidhi; 79 verses) are pakṣaccheda, loharañjana (in particular the colouring of lead and tin, which makes them resemble gold), and the preparation of bījas, viḍas, and other substances.²¹⁸ Chapter eight (golakavidhāna; 18 verses) describes the preparation of two kinds of golaka (a variety of baddha mercury), used in transmuting other metals into gold.²¹⁹ Chapter nine

(auśadhibandhana; 14 verses) is about the bandha of mercury by means of plant juices and about bījarañjana.²²⁰ Chapter ten (nāgasamkramaṇa; 13 verses) is about the samkramaṇa (i.e., the rañjana and bandha) of mercury by means of nāga and vaṅga,²²¹ chapter eleven (tārotkarṣavidhāna; 24 verses) about tārotkarṣa (the colouring of silver, which makes it resemble gold) and the six types of kūrpa, which remove impurities.²²² Chapter twelve (śulbārakālikāccheda;²²³ 77 verses) is concerned with the removal of the impurities (kālikāccheda) left in copper (śulba) and brass (āra).²²⁴

Chapter thirteen (vaṅgastambhaśodhana) gives an account of the stambha (i.e., bandha) of mercury by means of vaṅga.²²⁵ Chapter fourteen (śodhanavidhi; 47 verses) describes bhāvana, garbhadruti, guṭikās, etc.²²⁶ The subjects of chapter fifteen (abhrakadrāvākādhikaraṇa; 251 verses) are the drāvaṇa, i.e., druti, of mica, its cāraṇa and jāraṇa, the preparation of surā, viḍas, and the processes called sāraṇa, krāmaṇa and vedha.²²⁷ Chapter sixteen (drāvaṇādhikāra; 289 verses) describes the drāvaṇa of dhātus, upadhātus, ratnas, etc.²²⁸ Chapters seventeen (guhyabandha; 616 verses) and eighteen (rasakaraṇabandhasaṃnyāsavidhāna; 720 verses) are concerned with the making of gold and silver, mercurial preparations for purposes of rasāyana and dehasiddhi, plants useful for particular alchemical operations, etc.²²⁹

By far the majority of the verses are ślokas. Long metres and an ornate style are found in particular in chapters seventeen and eighteen (17.138–148, 531–535, 593–603; 18.387–413).

The *Rasopaniṣad* refers to earlier works on which it is based (1.14): *Prābhṛta*-, *Vā-tula*-, *Brāhma*-, *Vaiṣṇava*-, *Aindra*-, *Śaṃkara*-, *Bṛhaspati*- and *Śaukra(mata)*. Authorities mentioned are Māṇḍavya (18.77) and Nāgārjuna (16.10).

The *Rasopaniṣad* is quoted in the *Rasatattvavivecana*. Both *Rasopaniṣad* and *Mahodadhi*, the work on which the former is said to be based, are named in the *Bhūtiprakaraṇa* of the *Gorakṣasaṃhitā*.²³⁰

Special features

The terminology regarding the saṃskāras differs from what is found in other treatises. Two series are mentioned. The first series consists of six processes (ṣaḍvidha rasakarman): śodhana,²³¹ tejana,²³² pācana,²³³ dāśana,²³⁴ cāraṇa²³⁵ and pātana²³⁶ (1.20cd–21ab). The second series is composed of ten operations: nigrāha,²³⁷ bandhana,²³⁸ agnyaṅkuśa,²³⁹ pakṣaccheda,²⁴⁰ vahnīkarman,²⁴¹ rasakriyā,²⁴² rañjana, krāmaṇa, sāraṇa and pratisāraṇa (1.21cd–22). Vedha is absent from the second series, although it is a very important process in the *Rasopaniṣad*.

The impurities of mercury are enumerated in one of the later chapters (15). The kañcukas are referred to in chapter one. Their removal is accomplished by means of the pakṣāṣṭakavidhi (1.61–63).²⁴³ The fermented fluid called surā or saṃdhāna, used for the pakṣaccheda of mercury, is made with the juice of thirteen plants (1.78–79). The most suitable substance for the bandhana and rañjana of mercury is lead (nāga; 2.1–2). The process called saṃnyāsa is carried out with a substance called mahāviḍa (2.19–22). The preparation of various kinds of kṛṣṭi (used in jāraṇa) is described (2.23–28). The bījas are said to be twenty-four in number (4.1–3).

Many groups of substances are listed in chapter four. Seven mahārasas are distin-

guished: māṅṣika, vimāla, rasa(ka), vaikrānta, sasyaka, capala and śaila (= śilājatu) (4.4), and seven uparāṣas: kāsisa, añjana, kāṅkṣī, haritāla, manahśilā, gairika and gandhapāṣāṇa (4.5).²⁴⁴ Seven metals, called loharasa, are enumerated (4.6);²⁴⁵ tin and lead are called pūtiloha; bronze (kāṁsa) and brass (āra) are the alloys (saṁkara; 4.7). Deva(loha), vaikrānta²⁴⁶ and vajra are grouped together as the mahāsāras; another substance is referred to as rasaloḥa (4.8). The seven gems (maṇi) are: gomedaka, amṛtāma,²⁴⁷ śyāmā,²⁴⁸ añjanamūlaka,²⁴⁹ lohitaṅka,²⁵⁰ kūṛpa,²⁵¹ and jyotiṛasa²⁵² (4.9–10ab). The seven salts comprise saindhava, romaka, sāmadra, biḍa, cūlikālavaṇa, kṛṣṇasuvārcala and uṣṭrī²⁵³ (4.10cd–11).

An unusual list of forty poisonous substances (viṣa) is found in chapter four, as well as a list of eighty minor poisons (upaviṣa). The forty major poisons (mahaviṣa) are: amṛta, āyudhapātana, bilva, chidrāṅga, citraka, duḥkha, ghora, ghūrṇaka or cūrṇaka, hālāhala, kālāhva, kālakūṭa, kāṇḍa, karkaṭa, kīṭaghna, madaviḥvala, madhusiddha, maṇḍa- or muṇḍamūla, māraka, markāṭa, māruja, mūlaka, nāgara, nārāca, nirjīva, pāṇḍara, parpaṭa, paṇḍara, pītamustaka, prāṇavardhana, romanāśana, rudhirasam-bhavaḍoṣa, rūkṣa, saktuka, sukṣīra, tamoghnaḥbija, tīkṣṇa, ugra, vatodumbarasamkāśa, vatsanābha, and viṣa (4.12–17ab). The eighty minor poisons are: agnimanthaka, ākhumāraka, akṣa, añkola, arka, bhallātaka, bilva, brahmasomā, cakramardaka, cīrī-bilvaka, citraka, dhātūrī, dvīpā,²⁵⁴ gandharvavāruṇī,²⁵⁵ gāṅgeyī, guṇḍī, hastivallī,²⁵⁶ iṅgudā, kābuki,²⁵⁷ kākajaṅghikā, kandakī,²⁵⁸ kaṇika,²⁵⁹ kāraka,²⁶⁰ karavīra, kaṇika, kaṭuka, kaṭukālābu, kaṭuvetasa, kohala,²⁶¹ the two kinds of koṣātākī, kuraṇḍa, kuṭaja, lāmbukā, lāṅgali, lodhra, madanā, madanakodrava,²⁶² mohanā, nāgāhvā, nicula, nimbakī, niśācarī,²⁶³ palaṇḍuka, palāśa, pāṭhā, pīlu, piṇḍālu, the two kinds of pippalī, priyālu, pūtika, śabara, sahā, śaivala, śāka, śigru, śiṁha, śirīṣa, śleṣmātākī, snuhī, śuka,²⁶⁴ śukanasā,²⁶⁵ sūraṇa, suvarcalā, svayaṁguptā, syanda, taptasūdana, trivṛtā, unmattā, uttamā,²⁶⁶ vacā, vajra, vajrakanda, vajravallī, vajrī, vandāka, vāśā, vāyu, and vyāghāta (4.17cd–26ab).

Other groups enumerated are the drāvaṇāṅga (4.26cd–28ab), raktavarga (4.28cd–29), amlagaṇa (4.30–31), bījavarga (4.32–33), surāvarga (4.34), pittavarga (4.39cd–40ab), a second raktavarga (4.40cd–42ab), and the viṣṭhāvarga (43–44). The items belonging to the drāvaṇāṅga are the animals called bheka (a frog), citrāṅga, dvimukhī, indragopaka, ṣaḍbindu, mātṛvāha, maṇḍalī, and gopamaṇḍalī, the plants called kharjū and rāmaṭha, and ṭaṇkaṇa.

Chapter four describes the way to prepare the following substances: mahācū-ṛṇa (4.48–50), nāga-, vaṅga-, tāṁra- and mārāmāṅṣika, nāga-, vaṅga-, rakta- and mārāhātaka (4.73–80),²⁶⁷ dvi-, tri- and caturhātaka (4.82);²⁶⁸ vimāla may be used as a substitute of māṅṣika (4.94–95) in the preparation of related substances. The mahāsāras are described: vimāla and māṅṣika (4.93cd–95), rasaka (4.96–100ab), sasyaka (4.100cd–108ab), capala (108cd–112ab), and śaila (4.114cd–115ab). Three types of śaila are mentioned (4.114cd–115ab).²⁶⁹ The number of bījas is said to be one thousand according to some authorities, five hundred according to others; the best among the ācāryas, however, take them to be 210 in number (4.117cd–118ab). The best varieties of rasaka are those found in Ahicchattrā and Aihikāpatha (6.4).

Chapter seven describes a kind of gold called caturthasāra (7.55–56), which re-

sembles mātṛkā.²⁷⁰ The term kūṛpa is explained in chapter eleven; kūṛpa is said to be sixfold and to consist of dāsana, pāsana, śodhana, mārḍava (= mṛdūkarāṇa), bodhana and rañjana (11.12–18). Chapter twelve mentions types of gold called mātṛkottara (12.25)²⁷¹ and hemaśaṣṭha (12.26).²⁷² The preparation of alloys of brass and gold is also described (12.59ab and 68ab). Chapter thirteen describes the purification of tin in a mixture of acidic and alkaline fluids.²⁷³

Chapter fifteen enumerates eight innate (sahaja) mahāḍoṣas of mercury: kṛṣṇatva (blackness), pakṣikā, sneha, the inability to fuse with (saṁkrama) metals, vepathu (= cañcalatā), sparśasaṁkrānti, bhuktamokṣa (vomiting of the grāsa), and saśabdatā (15.55–56). It also lists six avasthās of mercury: puṭasaha (able to withstand the heat of puṭa), lepasaha, andhamūṣāsaha (able to withstand the heat in the mūṣā), sāraṇasaha, the absence of loss in weight (kṣaya) after liquefaction (druti), and lohāvarta (15.58–59). The six avasthās during abhrakacārāṇa are: bhrama, bhaṅgasthiti, kampa, jalūkā-bandha, kākaviṣṭhā, and piṇḍa (15.88);²⁷⁴ the six ḍoṣas are: pārśvagrāhin, pucchagrāhin, grasita, veṣṭita, mūrchaka, and himsaka (15.89). The characteristics of mercury after jāraṇa of abhṛaka are: kapila(varṇa), anucara, niḥśabda, anyadarśaka, akṣīṇa, and agnisaha (15.91). The six characteristics of rasājīṛṇa are enumerated (15.92). Mercury is said to be baddha when the seven gatis are absent (15.97).²⁷⁵ The preparation of various types of surā (15.160cd–162 and 238–251) and of a number of viḍas is described (15.198–235).²⁷⁶

The best type of māṅṣikā is found near (the river) Tāpīyāsī²⁷⁷ (16.1). A process is described, called lakṣmīpatikriyā, which turns silver into gold (16.2–6ab). Another process, which makes copper assume properties of silver, is ascribed to Nāgārjuna (16.6cd–10). Another process again, transmuting copper into gold, is carried out by help of small pebbles of the size of grains of pepper, which contain gold; these pebbles are found in the neighbourhood of a village called Prīti, situated in Kerala, not far from the coast (16.11–17). Some more methods to make gold by means of these pebbles are added (16.18–27).

Chapter sixteen contains a vaikṛntakalpa (16.28–77ab).²⁷⁸ Vaikṛntaka is said to be found near the river Vikṛntā,²⁷⁹ in a country called Valkala.²⁸⁰ The usefulness of vaikṛnta in a number of alchemical operations is delineated.²⁸¹ Seven varieties of vaikṛnta, each variety having a distinct colour (16.78–79ab), are described,²⁸² together with their uses (16.79cd–100ab). More uses of vaikṛnta are dealt with in the prose passage that follows. This passage also enumerates a series of regions where vaikṛnta is found: Meḍhapāṭa,²⁸³ Svāṭa, Vairātanagara, Nepāla, Camūraṅga,²⁸⁴ Kāśmīra, Āndhradeśa, Śrī-parvata,²⁸⁵ Dramiladeśa, and Karahāṭa.²⁸⁶ The same prose passage deals with deva-loha, a mahāsāra found near a Śiva temple in the neighbourhood of Rāśina, a village in the Śeṣaṇa region of southern India; this substance comes forth spontaneously from the pātāla (a region under the earth) during thunderstorms in the early raining season and is also found in mines. The verses following upon the prose give an account of the wonderful actions of this deva-loha, used for rasāyana and for vedha of all the metals (16.101cd–137ab). The next section of chapter sixteen is concerned with agnijāru,²⁸⁷ a substance deriving from the jāyū of marine animals; it resembles deva-loha in being sparśavedhin, i.e., it turns base metals into gold or silver by its mere touch. Agnijāru

should not be handled with one's hands, but with an *ankuśa* (hook) only. Five varieties are described, called after five birds: *pārāvata*, *hamsa*, *cakravāka*, *agnika* and *śuka* (16.137cd–185).²⁸⁸ The remaining part of the chapter is devoted to *druti* of the metals.

Chapter seventeen is about *guhyabandha*, a process to be carried out with the assistance of a suitable woman, selected for this purpose. The characteristics that should be present in this woman and her male partner are described (17.3–9), followed by the *guhyabandha*, revealed by *Umā*, who received her knowledge from *Īśvara* (i.e., *Śiva*); the product of this complicated process is suitable to aurification (17.15–26). The next subject is *cāraṇa*; the plants employed in this process are listed (17.37–38). The preparation of a *pāratīya* *rasendra*, called *amṛta*, is dealt with; this substance is endowed with a long series of miraculous actions. A mythological story about the appearance of various substances during the churning of the ocean and the ensuing great battle is inserted (17.63cd–74). The proper way of using mercurial products (*rasa*) and the results obtained²⁸⁹ are explained (17.75–116). The symptoms of improperly assimilated (*ajīrṇa*) *rasas* are given, together with the treatment of this type of disorder (17.117–129), followed by the proper behaviour after the ingestion of mercurial products (17.130–137). The wonderful effects of *rasas* are colourfully described in elegant verses in long metres (17.138–148),²⁹⁰ followed by the preparation of *pathyāguḍa* and other *rasāyanas* (17.149–188), and a ritual to be performed (17.189–208).

A large series of plants employed in various alchemical processes, called *jātharagrāhī* or *jātharagrāhimūlī*, is described (17.210cd–240),²⁹¹ followed by those called *piṇḍagrāhī* or *mahauśadhi* (17.241–300). These lists are preceded by an *agnimantra*.

The remaining part of the chapter is filled with processes resulting in the production of artificial gold and silver.

The *jātharagrāhī* and *piṇḍagrāhī* plants²⁹² are: *ādityavallī* (220), *agnivṛkṣa* (300), *ajamārī* (300), *āmṛtākatī* (228), *amṣumatī* (223), *bhūśīrīṣaka* (299), *bhūtakeśā* (218), *brahmadāṇḍa* (278), *brahmaṇī* (294), *chattrī* (252), *citrakapatrinī* (282), *deva* (254), *devaśrī* (284), *garuḍā* (291), *gomārī* (275, 299), *hemalatā* (293), *jyotiḥkanda* (273), *jyotirvṛkṣa* (273), *jyotistrīṇa* (273), *kesarī* (235), *khadirapatrinī* (276), *khadyotoddhūlikā* (275), *kiṃśuka* (226), *kīṭamārī* (288), *kṛṣṇamūlī* (219), *kumārī* (267), *kuravakī* (300), *madhutṛṇa* (278), *nāginī* (282), *nārācī* (265), *naravandī* (270), *nīlacitrakā* (262), *padmadāṇḍa* (278), *pīṭakodravamārī* (299), *raktapūspā* (225, 300), *śabarakā* (253), *saptaparṇī* (296), *sārā* (229), *sarṣapapatrinī* (300), *śataparpikā* (227), *simhikā* (290), *somā* (251), *śrījyā* (280), *sthalajapadminī* (259), *suvarṇadāṇḍa* (278), *tilakapatrinī* (269), *triśūlī* (299), *vajrī* (255), *vanakustumbārī* (300), *vārāhī* (224), *vijayā* (281), and *yavacarcikā* (299).²⁹³

Chapter eighteen is about the transmutation of various metals into gold and silver. Seventy *divyauśadhis* are enumerated (18.81–90), followed by plants called *jātharagrāhika* (18.101cd–111ab)²⁹⁴ and *sparsāvedhin* (18.111cd–117). Numerous *divyauśadhis*, *sparsāvedhin* plants and other ones are described in prose (between 18.117 and 118). The verses which follow mention series of plants which are *rañjana* (18.136cd–139), *pāśana* (18.142), *dīpana* (18.151cd–152), *chedana* (18.153cd–156ab), etc.

The seventy *divyauśadhis*²⁹⁵ are: *adhaḥparṇī*, *ajamārīṇī*, *ajanānī*, *ambāṣṭhikā*, *amṛtā*, *amṣumatīśikhā*,²⁹⁶ *anāladruma*,²⁹⁷ *anantā*, *ardhakeśī*,²⁹⁸ *bhogavatī*, *bhūkadamba*, *bhūśīrīṣakā*, *calāmadhuk*(?), *chattrī*, *damṣṭrīṇī*, *dāsīvallī*, *ghanamustakā*, *ghaṭābhra*, *ghoṇasī*, *gomārī*, *hutāśanataru*, *kākapadī*, *kāminī*, *kapilā*, *karavikā*, *karavīrakā*, *kumārī*, *kumudaprabhā*, *kumudī*, *kuraṅgī*, *kuravakī*, *kustumburu*, *kvāthinī*, *lalakambunā*, *marīcī*, *meghā*, *mūlī*, *nābhilā*, *nahuṣī*, *nārāca*, *naradevā*, *nīlacitrakā*, *paunḍarikā*, *pīṭakodravamārīkā*, *raktajihvā*, *raktapūspā*, *rocanā*, *sahasrāṃśā*, *samopetā*, *sarṣapaparṇī*, *sarvacchedanikā*, *śatapūspī*, *śatruviśruti*, *somā*, *sthalapadminī*, *suparṇī*, *suraktā*, *tālī*, *tejovātī*, *tikṣṇā*, *tilakapatrinīkā*, *tridaṇḍī*, *triśikhā*, *triśūlī*, *udgatā*, *vajrā*, *vārā*, *viśadharā*, *viṣaparpikā*, and *yakṣiṇī* (18.81–90).

The *jātharagrāhika* plants²⁹⁹ are: *abhayā*, *ādityavallikā*, *amlavetasī*, *āmṛtākatī*, *apāmārgā*, *apattrā*, *āpitikā*, *āṭavī*, *bhūtakeśīnī*, *brahmaputra*, *brahmanvṛkṣa*, *cakramardaka*, *carcikā*, *devadālī*, *dhūsarā*, *dravantikā*, *ekamūlinī*, *ganḍakī*, *ganḍikā*,³⁰⁰ *garuḍī*, *hastikarṇī*, *janitrā*, *jārā*, *kaṇṭhakālī*, *kaṭukā*, *karṇikā*, *kesarī*, *ketakī*, *kovidārā*, *kṛṣṇavallikā*, *kṛṣṇaigudā*, *kuhetaka*, *laṣunī*, *mahirā*,³⁰¹ *maṇḍūkapatrinīkā*, *mārjārapādī*,³⁰² *nāginī*, *naradevā*, *netrapūspā*, *nīlāñjalikā*, *nīlotpala*, *pañcaviṃśatiparpikā*, *parājītā*, *pārījātakī*, *pāṭalī*, *pīlu*, *pīlupatrinīkā*,³⁰³ *pūṣpattrā*, *rājakoṣṭākatī*, *rasadūtīnī*, *reṇukā*, *śabarī*, *śamī*, *sārā*, *śigrukā*, *śikhā*, *simhilāṅgulikā*, *śrīdanī*, *sthalasamaṅgā*, *sucitriphalā*, *surabhī*, *suvarṇapūspī*, *śvānapucchā*, *śvetagirikarṇikā*, *tālī*, *tilakavallikā*, *trivṛt*, *vārāhī*, *viṣavṛkṣakā*, *viṣṇukrāntā*, and *viṣyandā* (18.101cd–111ab).

The *sparsāvedhin* plants are: *amṛtāsanī*, *bhramarī*, *bhūmikadambikā*, *bhūmisamkocā*, *brāhmaṇī*, *devaśrī*, *garuḍā*, *gorocanā*, *hastimatā*, *hemalatā*, *khadyotā*, *kīṭamārīkā*, *kuravakī*, *kuravikā*, *madhutṛṇa*, *mīnavallikā*, *mṛgadūrvā*, *mūrdhnī*, *nīlā*, *padmadāṇḍā*, *pīṭamustakā*, *prthivī*, *rohinī*, *śākī*, *saptaparṇī*, *sarṣapī*, *śaśakarṇī*, *simhikā*, *śīphā*, *śrījyā*, *śuṇṭhī*, *śyāmakā*, *tāmbūlavallī*, *vajranārācī*, *vajrinī*, *vāruṇī*, *vijayā*, and *vīrā* (18.111cd–117).

The *divyauśadhis* of the prose section between 18.117 and 118 are: *adhaḥparṇī*, *ajamārī*, *amṛtā*, *amṛtāsanī*, *amṣumatīśikhā*, *bhogavatī*, *bhūmikadambikā*, *bhūmisamkocā*, *bhūśīrīṣikā*, *chattrā*, *cilavallī*, *damṣṭrīṇī*, *dāsīvallikā*, *devaśrī*, *drumā*, *ekamūlī*, *garuḍā*, *ghanamustakā*, *ghoṇasī*, *gomārī*, *gorocanā*, *haranetrā*, *hastimatā*, *kākapadī*, *kālī*, *kapilā*, *karavīrā*, *kāśī*, *khadirā*, *khadyotā*, *kīṭamārī*, *kumārī*, *kuravakī*, *kustumburu*, *mābalā*, *madhutṛṇa*, *marīcī*, *meghāśmanā*,³⁰⁴ *mṛgadūrvā*, *mūlī*, *mūrdhnī*, *nāgodarī*,³⁰⁵ *nahuṣī*, *nāśīnī*, *nīlā*, *nīlacitrakā*, *padmadāṇḍā*, *paunḍarikā*, *pīṭamustakā*, *prthivī*, *rā-dhanā*, *raktajihvā*, *raktapūspā*, *rohitā*, *sahasrāṃśā*, *śākī*, *samopetā*, *saptaparṇī*, *saralā*, *sarṣapā*, *sarvacchedanikā*, *śatapūspikā*, *śilā*, *simhikā*, *somā*, *śrīmūlī*, *śrīvijayā*, *sthalapadminī*, *śuṇṭhī*, *suparṇī*, *suraktā*, *tāmbūlavallī*, *tejovātī*, *tikṣṇā*, *tiktā*, *tilakadambakā*, *tilakapatrinīkā*, *tridaṇḍī*,³⁰⁶ *triśūlī*, *udgatā*, *ūrdhvakeśī*,³⁰⁷ *vajrā*, *vajranārācī*,³⁰⁸ *vajrinī*, *vārā*, *vijayā*, *viśadharā*, *viṣaparpā*, and *yakṣiṇī*.

The other plants described in the same section are: *abhayā*, *ādityavallī*, *amlātakī*, *amlavetasī*, *apāmārgā*, *āpitikā*, *aruṇī*, *asvatthapatrinīkā*, *āṭavī*, *bandhakī*, *bhūmipāṭalī*, *brahmaputrakā*, *citrā*, *deva*, *devadālī*, *dhūsarā*, *dhuśrutā*(?), *dravanī*, *ekamūlikā*, *ganḍikā*, *garuḍī*, *hastikarṇī*, *hetaka*, *janitrā*, *jārā*, *kākamācī*, *kalinarā*, *kandakī*, *karṇikā*, *kaṭukā*, *kesarī*, *keśī*, *ketakī*, *kovidārī*, *kṛṣṇaphala*, *kṛṣṇavallī*, *kṛṣṇeṅgudā*, *laṣunī*, *maharā*,³⁰⁹ *nāḍī*, *nāginī*, *netravṛkṣā*, *nīlāñjalikā*, *nīlotpala*, *parājītā*, *pārījātakī*, *pī-*

lupatṛikā, pīlupṛkṣa, rājakośātākī, rasadūti, reṇukā, śabarī, śamī, sārā, śataparvan,³¹⁰ śikhā, śimhilāṅgulikā, śrīmatī, sthalasamaṅgā, surabhī, suvarṇapūspī, śvānapucchā, śvetagirikarṇikā, trivṛt, vārāhī, vastuvallī, viṣavṛkṣakā, viṣṇukrāntā, and viṣyandī.

Metal ores (18.464–481, mixed with prose) and the extraction of the metals from them are also described.

Some interesting terms employed in the *Rasopaniṣad* are: aravindaka (4.118),³¹¹ ariṣṭaka (12.70),³¹² aśmanṛpa (7.26),³¹³ bhūpa (12.68),³¹⁴ campaka (4.118),³¹⁵ chidra-yantra ((6.9; 16.15 and 198),³¹⁶ ghanāṅkuṣa (1.108),³¹⁷ ghaṇṭaloha (2.42),³¹⁸ govāla (12.33),³¹⁹ kaṭaśarkara and -śarkarā (2.26; 15.27),³²⁰ mahākhu (13.12),³²¹ nirvāhika-yantra (10.2), prakāśamūṣā (12.8), raktaśulba (12.23),³²² śakalendra (16.25),³²³ strī-sambhava (4.85),³²⁴ sutikṣṇa (4.118),³²⁵ utpala (4.118),³²⁶ vaiṣṇava (4.119; 327 6.43), and vaiṣṇavāstra (15.194).³²⁸

Human flesh (naramāṃsa: 7.44)³²⁹ and human blood (narakudhira: 6.20 and 14.27; mānuṣa rakta: 16.13) are occasionally used in alchemical operations.

Uncommon names of plants are: adhaḥpūspī (15.75),³³⁰ agniparṇī (15.75, 139, 144),³³¹ bhikṣumārī (17.373), bhūmīkurava (7.60), dalottamā (14.22), devī (15.44, 143),³³² dharākura (9.2),³³³ dravamūlī (17.394), gandharvavāruṇī (4.19), godhā (15.103),³³⁴ govandanā (17.38), halā (1.78; 9.2; 15.108),³³⁵ hastivallī (4.20), jalabhāginī (17.37), kābuki (4.21), kadambinī (14.44), kalyāṇī (17.37),³³⁶ kanakabandhanī (7.37),³³⁷ kandalī (1.100; 16.73),³³⁸ kāntā (15.44), karatī (1.78), kaṭuveta (4.17), kavāṭī (15.100),³³⁹ kuraṭī (14.8 and 22), lohitaṅka (9.12),³⁴⁰ lohitaṅkī (18.33), mahāvṛkṣa (12.63),³⁴¹ malaghnī (17.451), mārjāravallī (1.82),³⁴² muktā (1.79),³⁴³ muktamūlī (1.79), nādeyī (17.451), niśācarī (4.21), piñcholā (17.125), piśācī (14.29),³⁴⁴ raktāsana (9.2), samudrakārpāsa (15.72), śaśatrṇa (7.37), setubandhinī (17.37), śimśumāra (14.30; 18.26), smarajihvā (15.76),³⁴⁵ śukā (15.139; 17.38),³⁴⁶ suputrīṇī (1.78),³⁴⁷ vanyakukkura (1.78),³⁴⁸ viṣālu (1.78; 13.14), viṣāluka (17.429), viṣaparṇī (12.18), viṣṇuparṇī (17.37 and 373),³⁴⁹ vṛttaparṇī (15.102),³⁵⁰ yavacarcī (7.77; 14.16), and yavacarcikā (15.93).

Date

The period of composition of the *Rasopaniṣad* is unknown. Indications pointing to a relatively early age are the similarities as to structure and contents with the *Rasārṇava* and the absence of references to zinc.³⁵¹

Chapter 13

Various works on rasaśāstra and ratnaśāstra

ABHRAKAKALPA: a treatise on the properties and medicinal uses of mica (abhraka), written in A.D. 1679.¹

ABHRAKALAKṢAṆA.²

ABHRAKAMĀRAṆAPRAKĀRA.³

ABHRAKASATTVA.⁴

ABHRAKAVIDHI.⁵

ABHRAKAYOGA.⁶

ĀDIMASIDDHĀNTA.⁷

AGASTYASAMHITĀ by Agastya. A treatise of this title is mentioned as a work on rasaśāstra by P.V. Sharma.⁸ An *Agastyasamhitā* is also referred to as a treatise on precious stones.⁹

An *Agastimata* is a work on ratnaśāstra.¹⁰ This treatise is the only one known describing a kind of bargaining through hand-signs, called hastasamjñā,¹¹ usual among jewellers in India;¹² this procedure has been recorded by Tavernier, who observed it during his travels.¹³ Some assign the *Agastimata* to the late sixth century;¹⁴ L. Finot regarded it as later in date than Buddhahṭṭa's *Ratnaparīkṣā* or *Ratnaśāstra*.¹⁵

The earliest reference to the *Agastimata* is found in Mallinātha's commentary on the *Śiṣupālavadha*.¹⁶ The *Agastyamata* was known to Merutuṅga, the author of the *Prabandhacintāmaṇi*.¹⁷

The *Agastīyaratnaparīkṣā*,¹⁸ an extract from the *Agastimata* in one hundred verses, deals with: vajra and muktā (4–42), māṇikya (43–61), nīla (62–75), marakata (76–81), gomedā (82–86), puṣyārāga (87–89), vaidūrya (90–92), lājāvarta (93), and pravāla (94–96).

An *Agastyasamhitā* forms part of the *Skandapurāṇa*; the Hālāsyamāhātmya of this *Agastyasamhitā* contains a chapter (23) on ratnaśāstra; this chapter, consisting of 201 verses, is called navaratnavikriyā.¹⁹

ĀMAKUṬHĀRACŪRṆAVIDHĀNA.²⁰

ĀNANDARASARATNAMĀLĀ.²¹

AṢṬADHĀTUMĀRAṆAVIDHI.²²

AṢṬADHĀTUPARĪKṢĀ.²³

AṢṬAMAHĀMĀTRĀ:²⁴ a medical treatise in eight chapters on the method of preparing eight rasayogas (the eight mātras) and on their uses; a commentary is found at the end of each part. The name of the author and that of the commentator are not mentioned.

The authorities and works quoted or referred to in the commentary are: *Ākara*,²⁵ *Amara*, *Ānandakanda*, *Bhairavayogin*, *Ekākṣaranighaṇṭukāra*,²⁶ *Lakṣmaṇa*, *Nighaṇṭu*, *Rasacintāmaṇi*, *Rasādīpikā*, *Rasahr̥daya*, *Rasakaumudikā*, *Rasamaṅgalā*, *Rasāmṛta*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasavaiśeṣikanighaṇṭu*, *Siddhanātha*,²⁷ *Sūtrasthāna*, and *Vaijayantī*.²⁸

AṢṬAMAHĀRASAVARṆANA.²⁹

ĀŚVINEYAMAHĀRĀJAMṚGĀṆKARASAVIDHĀNA.³⁰

ĀYURVEDARASAŚĀSTRA.³¹

ĀYURVEDARASAŚĀSTRA by Mādhava.³²

ĀYURVEDĪYA KHANIJA-VIJÑĀNA by Kavirāja Pratāpasimha.³³

This work deals with mercury (rasa) and sulphur (gandhaka); it describes the minerals (khanija) containing these elements; numerous formulae of rasayogas are also found in it.

Sources mentioned in this work are: *Arkaprakāśa*, *Āyurvedaprakāśa*, *Basavarājīya*, *Bhaiṣajyaratnāvalī*,³⁴ *Bhāvaprakāśa*, *Bṛhadyogatarāṅgiṇī*, *Cakradatta*, *Nighaṇṭuratnākara*, *Pāradasaṃhitā*, *Rasacaṇḍāmsū*, *Rasadarpaṇa*, *Rasakāmadhenu*, *Rasapārījāta*, *Rasarājasundara*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasasārapaddhati*, *Rasatarāṅgiṇī*, *Rasāyanasaṃgraha*, *Rasāyanasāra*, *Rasayogasāgara*, *Rasendracintāmaṇi*, *Rasendrasārasaṃgraha*, *Saivālabhākṣyamata*, *Sāriṅgadharasaṃhitā*, *Ṭoḍarānanda*, *Vaidyacintāmaṇi*, *Vaidyajīvana*, *Vaiṅgasena*, *Yogacintāmaṇi*, and *Yogaratanākara*.

BANDHASARVASVA by Gorakṣanātha.³⁵

BHAIRAVAGUṬIKĀVIDHI.³⁶

BHAIRAVAPRASĀDA.³⁷

BHAIRAVATANTRA.³⁸

BHAIṢAJYASĀRA.³⁹ *Bhaiṣajyasārāmṛta*,⁴⁰ or *Bhaiṣajyasārāmṛtasamhitā*,⁴¹ by Upeṇḍramiśra. This work was used in the compilation of Dattarāma's *Bṛhadrasarājasundara*,⁴² Jñārasarāmaśarma's *Anupānadarpaṇa*, and Hariprapanna's *Rasayogasāgara*.⁴³

BHARĀṆYAUṢADHA.⁴⁴

BHARĀṆYAUṢADHAPRAYOGA.⁴⁵

BHĀRATĪYARASAPADDHATI by Atrideva.⁴⁶

BHĀSMACIKITSĀ.⁴⁷

BHĀSMACŪRṆAVIDHĀNA.⁴⁸

BHĀSMAKAUMUDĪ by Prāṇakṣṇa Viśvāsa, son of Rāmahari, grandson of Dayarāma.⁴⁹

BHĀSMANIRMĀṆAKRAMA.⁵⁰

BHĀSMANIRŪPAṆA.⁵¹

BHĀSMASĀDHANA.⁵²

BHĀSMASINDŪRĀDINIRŪPAṆA.⁵³

BHAVĀNĪMATA.⁵⁴ This work is quoted or mentioned as a source in the *Rasakakṣāpuṭa*, *Rasarājalakṣmī*, *Rasaratnapradīpa*, *Rasasindhu*, and *Ṭoḍara's Āyurvedasaukhya*.⁵⁵

BHŪNĀGASATTVANIRŪPAṆA.⁵⁶

BHŪNĀGATĀMRAKALPA.⁵⁷

BHŪTABHAIRAVĪ by Jñānabhūpati.⁵⁸

BHŪTABHAIRAVĪRASANIRMĀṆAVICĀRA.⁵⁹

BṚHADRASARĀJASUNDARA by Dattarām Caube.⁶⁰

The treatise consists of three khaṇḍas, the first and third of which are divided into two parts. The first five chapters (adhyāya), forming together the pāradaprakaraṇa of the first half of the first khaṇḍa, deal with mercury and its processing (1–52). The remaining part of the first half of the first khaṇḍa is devoted to gandhaka (52–57), suvarṇa (57–64), raupya (64–68), tāṃra (68–74), vaṅga (74–78), jāsada (78–80), nāga (80–83), loha (83–93), maṇḍūra (94–95), and miśradhātus (alloys; 95–100).

The second part of the first khaṇḍa is concerned with the upadhātus: suvarṇa- or hemamākṣika (100–107); raupya- or tāramākṣika (107–108); vimāla or tāpīja (108–111); tūtha (111–115); capala (115–117); kaṅkuṣṭha, also called kākakuṣṭha, varāṅga and kolavāluka (117–118); rasaka (118–122); sindūra, also called raktareṇu, nāgagarbha and śisaka (122–123); girisindūra (123); abhṛaka, also called vajra and gagana (123–143); haritāla (143–159); añjana (159–161); kāsisa (162–163); gairika (163–164); hīṅgula or darada (164–168); ṭaṅkaṇa and tuvarī (168–170); maṇḥśilā (170–172); śaṅkha (172); khaṭī (172–173); varāṭikā or kapardikā (173); muktāśukti (174); śambukā (174); vālu(kā), also called sikatā, śarkarā and retajā (174–175).

The second khaṇḍa discusses śilājatu (175–182), enumerates the sādharmaṇasas (kampilla, capalagaurīpāśāna, narasāraka, kapardī, vahnijāra, girisindūra, hīṅgula, kedāraśṛṅga), and deals with kampilla (182), gaurīpāśāna or hatacūrnaka (182–183), navasāra (= narasāraka) or cullikālavaṇa (183), agnijāra (= vahnijāra; 184), samudraphena (184), bola (184), guggulu (185), rasakarpūra (186), the ratnas and uparatnas (186–213), viṣas and upaviṣas (213–227), groups of substances (227–229),⁶¹ weights and measures (229–230), puṭas (230–231), and yantras (231–242).

The first part of the third khaṇḍa consists of rasayogas against the diseases mentioned in the *Mādhavanidāna*. Added are prescriptions against kapharoga (464–466) and pittaroga (466–467) after vātavyādhi, against somaroga (493–494) after prameha, and formulae with a rasāyana and vājīkaraṇa action (536–550).

Sources quoted are: *Bauddhasarvasva* (429), *Bhaiṣajyasārāmṛtasamhitā* (255),⁶² *Bhāluki* (117),⁶³ *Bheḍa* (384), *Bhoja* (384), *Brahmajyotirmunīndra's Ratnasāgara* (195–196),⁶⁴ *Candratā's Yogaratnasamuccaya* (459), *Gorakṣanātha* (439),⁶⁵ *granthāntara* (100, 440), *Jñānājyotis* (288),⁶⁶ *Kākaçaṇḍesvara* (138), *Kaṣyapaśamhitā*

(390),⁶⁷ Kṣīrasvāmin (142),⁶⁸ Lakṣmaṇotsava (330),⁶⁹ Mādhava's Sārakaumudī (291),⁷⁰ Nāgārjuna (118, ⁷¹ 182),⁷² Nārāyaṇavilāsa (397),⁷³ Purandararahasya (36),⁷⁴ Rājaraṣeśvaracintāmaṇi (148),⁷⁵ Rasadarpaṇa (118⁷⁶ and 159),⁷⁷ Rasapaddhati (118–119⁷⁸ and 188),⁷⁹ Rasapradīpa (256 and 323),⁸⁰ Rasarāja (296),⁸¹ Rasarājaka (298),⁸² Rasaratnākara (388), Rasaratnasamuccaya (244, 406, 464), Rasārṇava (212⁸³, 463), Rasasāgara (279, 330, 458–459, 487), Rasasindhu,⁸⁴ Rasendracintāmaṇi (256), Rasendrakalpadrūma (206),⁸⁵ Rasendrapadmakośa (206),⁸⁶ Rasendrasaṃhitā (376),⁸⁷ Śambhu (235),⁸⁸ Sārasaṃgraha (384–385),⁸⁹ Sārāvalī (384),⁹⁰ Śivānubhava (330),⁹¹ Suśeṇa (300),⁹² Suśruta (1), Ṭoḍarānanda (121), Vāgbhaṭa (117),⁹³ Vāgbhaṭatantra (1), Vaidyanātha (137),⁹⁴ Vaidyarahasya (439–440),⁹⁵ Vaidyasāgara (1), Vaṅgasena (395–396), Vasantarāja (429),⁹⁶ Vṛnda (385–386), Yogasārāvalī (458),⁹⁷ and Yogataraṅgiṇī 463–464).

The Rasarājasundara is one of the sources of the Āyurvedīya Khanijavijñāna, Bhāratabhāṣajyaratnāṅkara, Bheṣajasaṃhitā, Pāradasaṃhitā, Rasayogasāgara,⁹⁸ Rasendra-sambhava, and Rasoddhātatantra.

The Rasarājasundara is quoted in the Kūpīpakvarasanirmāṇavijñāna, the Rasatattvavivecana, Hazārīlāl Sukul's commentary on the Rasaratnasamuccaya, Khare's commentary on the Rasaratnasamuccaya, and Somadevaśarman's commentary on the Āyurvedaprakāśa. Hazārīlāl Sukul also refers to Dattarāma.

The miśradhātus (alloys) described are: two varieties of kāmśya (puṣpa- and tailakakāmśya), kāmśaka, two varieties of pittala (rājāritikā and kākātūṇḍī), pañcaloha, and bharta or vartalohaka.

Vimala is of two varieties: suvarṇa- and rajatavimala, while some add a third kind, called kāmśyavimala; sasyaka is said to be the same as tuttha; kharpara is a variety of tuttha; the preparation of nāgātāṃra is described (113); capala is of four varieties: gaura, śveta, aruṇa and kṛṣṇa; capala is regarded as either a mahārāsa or an uparāsa (116); kaṅkuṣṭha is of two varieties: nalikā- and reṇukākaṅkuṣṭha; kaṅkuṣṭha is an upadhātu of vaṅga (tin); rasaka is of two varieties: dardura and kāravellaka, but Nāgārjuna distinguishes the varieties called rasaka and kalambuka; the opinions of the authors of the Rasadarpaṇa and Rasapaddhati are quoted on rasaka and its varieties; abhṛaka is of four varieties: brāhmaṇa, kṣatriya, vaiśya and śūdra; their colours are white, red, yellow and black respectively; black abhṛaka is of the usual four varieties; haritāla is of two varieties: pattra- and piṇḍaharitāla, but some distinguish four varieties: piṇḍa, pattra, godanta and vakadāla; añjana is of two kinds: yāmuna and kāpota; sroto'ñjana is of two kinds too: sroto'ñjana sensu stricto, which is black, and sauvirāñjana, which is white; the Rasadarpaṇa distinguishes five varieties of añjana: sauvirāñjana, rasāñjana, sroto'ñjana, puṣpāñjana and nīlāñjana; kāsīsa is of three varieties: sita, śyāma and pīta; others distinguish two varieties called vāluka and puṣpavāluka; gairika is of two varieties: pāṣāṇa- and svarṇagairika, but some distinguish a third variety; hīṅgula is of three varieties: camāra, śukātūṇḍa and haṃsapāda; ṭaṅkaṇa is of three varieties: sphaṭikābha, guḍaprabha, and paṇḍura or nīlakaṇṭha; manāḥśilā is of two varieties: manohvā and pīvarī, or of three types called śyāmāṅgī, karavīrikā and dvikhaṇḍā; khaṭī is of two types: khaṭī and gaurakhaṭī; varāṭikā is of three types: white, red and yellow.

Several classifications of śilājātu are mentioned: kāñcana-, raupya-, tāṃra-, vaṅga-, nāga-, and lohaśilājātu, gomūtra- and karpūraśilājātu, giri- and ūsarasaṃbhava; a white variety of śilājātu is called soraka. Bola is of two varieties: rakta and śyāma.

The ratnas and uparatnas are variously classified; the group called maṇirasa consists of rājāvarta, puṣpa(rāga), mauktika, vidrūma and vaikrānta (188); the usual kinds of diamonds are described; its five defects are: mala, bindu, yavarekhā and kākapada;⁹⁹ the four types of bindu are: āvarta, varta, bhālabindu and yavākṛti;¹⁰⁰ the eight usual sources of pearls (mauktika) are enumerated: the pearl oyster (śukti),¹⁰¹ the pearl mussel (śaṅkha),¹⁰² the elephant,¹⁰³ hog (kroḍa),¹⁰⁴ snake,¹⁰⁵ fish,¹⁰⁶ frog, and bamboo (veṇu);¹⁰⁷ eight varieties of vaikrānta are described.

The viṣas are variously classified into groups consisting of thirteen, eighteen and nine items; two classifications of the upaviṣas are mentioned; the first group consists of snuḥī, arka, lāṅgalī, guñjā, hayārī, viṣamuṣṭikā, jepāla, unmatta, and ahiphena (223); the second group is composed of bhallātaka, ativiṣā, four types of khākhasa, two types of karavīra and ahiphena, four types of dhattūra, two types of guñjā, nirviṣī, viṣamuṣṭi, and lāṅgalī; bhaṅgā and sehuṇḍa, left unmentioned in the classifications, are also described (226);

The yantras described are: kavacī-, dolā- or svedana-¹⁰⁸ garbha-, haṃsapāka-, vidyādhara-, lavaṇa-, ḍamaruka-¹⁰⁹ somānala-¹¹⁰ ūrdhvanalikā- or ṭaṅka-, vāluka-, bhūdhara-, pātāla-, dīpikā-, tejo- or lavaka-, kacchapa-, jaraṇā-, tulā-¹¹¹ jala-, dhūpa-¹¹² sthālī-,¹¹³ gaurī-, koṣṭhayantra, vajra- or andhamūṣā, puṭa-, cakra-, pālikā-¹¹⁴ iṣṭikā-, koṣṭhikā-, baka-, nāḍikā-, vāruṇī-, tiryakpātana-, kandu-¹¹⁵ and vallabhīyantra.

The divyauśadhis of the Rasarājasundara are (34–35): ajagarī, ajayā, amlapatrī, aśokaṇāmnī, āsurī, aśvatthapatrī, bhūtakeśī, bilvadālā, bilvātāṅkī,¹¹⁶ brahmaṇḍī, cakoranāsā, citraka, devīlātā, dhanurvallī, gomārī, gonasī, gorocanā, goṣṭhāṅgī, hemadaṇḍī, hemalātā, īśvarī, jalapadmiṇī, jayā, kaṭutumbī, kālaparṇī, kandakṣīrī, kandapatrīkā, khadirapatrī, kīṭamārī, kṛṣṇavallī, kṣetrī, madhutṛṣṇā, mahāvallī, mayūrasīkhā, nāgaṇī, nīlotpala, padmakandā, palāśatilakā, patikṣīrā,¹¹⁷ punnāgapatrīkā, rajanī, raktakandavatī, raktavallī, rohiṇī, rudravantī, savarī, saptaparṇī, sarvarā, śiṃhikā, somavallī, śṛṅgā, śrīnāmnī, talī, tridaṇḍī, trijaṭā, triśūlī, tṛṇajyotiṣ, tumbikā, vajranāmavallī, vajravallī, vārāhikanda, vijayā, viśalyā, and vyāghrapādalātā.¹¹⁸

The author calls himself in the introductory verse Māthuranandana, a resident of Madhupurī; the Hindī translation adds that his name is Dattarāma. The colophon of chapter one identifies him as Dattarāma, the son of Śrīmāthura Kṛṣṇalāla. A more detailed genealogy is found at the end of the verses on the miśradhātus; the author, Dattarāma, informs the reader that he is a brāhmaṇa of Māthuravamśa, son of Kṛṣṇalāla (Kanhaiyālāl), who was the son of Haricandra, one of the three sons of Ghāṣīrāma.

Dattarāma belongs to the twentieth century.¹¹⁹

BRHATSAMHITĀ by Varāhamihira. This treatise contains four chapters on ratnaparīkṣā.¹²⁰ Chapter 79 deals, after a short introduction (1–3) and a list of precious and semi-precious stones (4–5), with the diamond (vajra; 6–18); chapter 80 (36 verses) is devoted to the pearl (muktāphala), chapter 81 (11 verses) to the ruby (padmarāga), and chapter

82 (one verse) to the emerald (marakata).¹²¹

The stones enumerated (79.4–5) are: vajra, indranīla,¹²² marakata, karketara, padmarāga, rudhirākha, vaidūrya, pulaka,¹²³ vimalaka,¹²⁴ rājamañi,¹²⁵ sphaṭika, śaśikānta (= candrakānta), saugandhika,¹²⁶ gomedaka, śaṅkha, mahānīla,¹²⁷ puṣparāga, brahmamañi,¹²⁸ jyotīra, sasyaka,¹³⁰ muktā, and pravāla.¹³¹

CANDRASENASIDDHĀNTA.¹³² Candrasena, who is also credited with the *Rasacandrodaya*, is a Rasasiddha.¹³³

Candrasena is quoted in the *Yogarātnākara*. The *Rasajalanidhi* attributes to him a description of puṣparāga¹³⁴ and a particular method of killing diamonds.¹³⁵

CARPAṬĪSIDDHĀNTA.¹³⁶ Carpaṭa, Carpaṭi, Carpaṭi(nātha), or Carvaṭi is mentioned in Jinadattasūri's *Suvarṇarāupyasiddhiśāstra*,¹³⁷ the *Rasakakṣāpuṭa*, the *Varṇaratnākara*,¹³⁸ and the *Vāsudevānubhava*.

He is quoted in the *Āyurvedasaukhyā*,¹³⁹ *Lohasarvasva*,¹⁴⁰ *Yogarātnākara*,¹⁴¹ and *Yogatarāṅgi*.¹⁴²

Some texts refer to him as a Rasasiddha.¹⁴³ Svātmārāma calls Carpaṭi one of the Mahāsiddhas.¹⁴⁴

Some regard Carpaṭi as one of the pupils of Gorakṣanātha,¹⁴⁵ others mention Vyāḍi as his teacher.¹⁴⁶ The Tibetan tradition sees in him the guru of Mīna Pā,¹⁴⁷ i.e., Mīnanātha or Matsyendranātha.¹⁴⁸ Carpaṭi is the twenty-fourth¹⁴⁹ or fifty-ninth¹⁵⁰ of the eighty-four Siddhas.¹⁵¹ King Sāhila of the Chamba state, who lived in the tenth century, is said to have held Carpaṭi in high esteem.¹⁵²

The *Śābaratantra* refers to Carpaṭanātha as one of the pupils of the twelve Kāpālika teachers.¹⁵³ A Hindī text called *Prāṇasaṅgalī* contains an improbable report about a conversation between Guru Nānak¹⁵⁴ and Carpaṭi.¹⁵⁵

Works attributed to Carpaṭi, apart from the *Carpaṭisiddhānta*, are the *Carpaṭaśataka*¹⁵⁶ and *Rasacandrodaya*.¹⁵⁷

Carpaṭi¹⁵⁸ is assigned to the eleventh,¹⁵⁹ twelfth or thirteenth century.¹⁶⁰

CIKITSĀRATNĀBHARĀṆA by Sadānanda Dādhīca.¹⁶¹ This work is one of the sources of Hariprapanna's *Rasayogasāgara*¹⁶² and Hariśaraṇānanda's *Kūpīpakvarasanirmānavijñāna*. Syphilis (phiraṅga) is mentioned in it.¹⁶³

CIKITSĀ(SĀRA)RAHASYA by Hārīta Muni.¹⁶⁴ This work is one of the sources of Hariprapanna's *Rasayogasāgara*. Hārītamuni is quoted in Nityanātha's *Rasarātnākara*.

CINTĀMAṆIRASAVIDHĀNA.¹⁶⁵

DATTĀTREYASAMHITĀ by Dattātreya.¹⁶⁶

DEVĪŚĀSTRA.¹⁶⁷ This work is quoted or mentioned in Āśubodha and Nityabodha Senagupta's commentary on the *Rasarātnasamuccaya*, the *Bhāratabhaisajyaratnākara*,¹⁶⁸ Hazārīlāl Sukul's commentary on the *Rasarātnasamuccaya*, the *Basavarājīya*, *Rasaprakāśasudhākara*, *Rasarātnasamuccaya*, and *Rasayogasāgara*.¹⁶⁹

The *Devīśāstra* is sometimes considered to be the same as the *Rasārṇava*.¹⁷⁰

DEVĪYĀMALA.¹⁷¹ Quoted in one of the pariśiṣṭas of the *Ānandakanda*,¹⁷² the *Kūpīpakvarasanirmānavijñāna*, and the *Rasakāmadhenu*. A *Devayāmalaka* is quoted in Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*.

DHARAṆĪDHARASAMHITĀ¹⁷³ by Dharaṇīdhara, son of Jvālānanda.¹⁷⁴ This work is profusely quoted in the *Pāradasaṃhitā*. Quotations also occur in Hazārīlāl Sukul's commentary on the *Rasarātnasamuccaya* and in the *Kūpīpakvarasanirmānavijñāna*.

The *Dharaṇīdharasamhitā* lists the following divyauśadhis: agnikarṇikā, ākhuparṇikā, amṛtākanda, apāmārga, aparājītā, bhūkadamba, brahmaṇḍī, brhatī, cakramārda, citraka, daṇḍī, dhātūrā, dūrvā, gojihvā, grīṣmasundarā, haridrā, hastiśuṇḍī, iṣu-puṅkhikā, īśvarī, jātī, jayantī, kākajaṅghā, kākamācī, kañcukī, kaṭutumbikā, kośātakī, kṛṣṇasārivā, kṣīrīṇī, kumārīkā, kusumbhaka, lajjālu, lakṣmaṇā, lāṅgalī, mahārāṣṭrī, maṇḍūkapaṇī, mīnākṣī, mṛgadūrvā, nīrakaṇā, nirguṇḍī, pātālī, raktālu, rambhā, rasāṅkuṣā, sairīya, śaṅkhapuṣpikā, sarpākṣī, śatāvarī, śīgru, śikhiśikhā, śimbikā, śrīdevī, sura-dārikā, sūryāvarta, śvetārka, tilaparnikā, tulasi, utpala, vajrakandā, vajralatā, vandhyā, vārāhī, varṣābhū, vidārī, and vṛddhī.¹⁷⁵

Works quoted in it are the *Rasahrdaya* and *Rasaprakāśasudhākara*.¹⁷⁶

The acquaintance of the author with the *Rasaprakāśasudhākara* implies that he cannot be earlier than the sixteenth century.

DHĀTUVJĀNA.¹⁷⁷

DHĀTUKALPA.¹⁷⁸

DHĀTUKALPARĀJA.¹⁷⁹

DHĀTUKAUTUKA.¹⁸⁰

DHĀTUKRIYĀ¹⁸¹ or *Dhātumañjarī*¹⁸² by Bhairavānandayogin.¹⁸³ This work forms part of the *Rudrayāmala*, is in the form of a dialogue between Mahādeva (i.e., Śiva) and Pārvaṭī, and deals with alchemy, not with iatrochemistry.

Many synonyms of the metals occur in this text. Zinc is designated by the terms jāsattva, jarāṭīta, rājata, yaśadāyaka, rūpyabhrātara, varīya, troṭaka, carmaka, kharpara, rasaka, rasavardhaka, etc.¹⁸⁴

The upadhātus mentioned, together with their synonyms, are: haritāla, manāṣīlā, abhraka, and somala or mallā.¹⁸⁵ Other substances mentioned, together with their synonyms, are: muktā (pearl), vidrūma (coral), kūrmaprṣṭha (tortoiseshell), śaṅkha, śukṭikā, gajadanta (ivory), śikhipiccha (peacock's feathers), nakha and keśa (nails and hair).¹⁸⁶

Many geographical names appear in the verses devoted to the places where various substances are found.¹⁸⁷ Some of these names are: Gautamādri (149), Gayādri (149),¹⁸⁸ Kāmarūpa (141; 144),¹⁸⁹ Kāmboja (146), Kedāra (148),¹⁹⁰ Kumbhādri (146), Laṅkā (121),¹⁹¹ Lihādri (149), Malādri (144), Mlecchadeśa (144), Nalādri (149), Nepāla (144; 147),¹⁹² Niṣkala (149), Pāvakādri (145), Sindhudeśa (141), Tripura (148), and Tryambaka (148; 150).¹⁹³

Various operations resulting in the production of artificial gold and silver are described, as well as several procedures to make substances which resemble these no-

ble metals. The accumulation of wealth (dhanasampatti) is an important subject in this treatise.

Among the foreign countries, mentioned in the verses on the origin of copper and zinc, figure Rūmadeśa and Phiraṅgaka,¹⁹⁴ which, together with the mention of phiraṅgaroga, indicates that this work is posterior to the sixteenth century.¹⁹⁵

A Bhairavānanda, who need not be the author of the *Dhātukriyā*, is mentioned in the *Bhāvaprakāśa*,¹⁹⁶ *Bheṣajasaṃhitā*,¹⁹⁷ *Bṛhadyogatarāṅgiṇī*,¹⁹⁸ *Rasasaṃketakalikā*,¹⁹⁹ and *Rasayogasāgara*.²⁰⁰

Bhairavānandayogin is referred to in the *Rasakāmadhenu*²⁰¹ and *Rasaratnasamuccaya*.²⁰²

A master magician called Bheravānanda (= Bhairavānanda) figures in Rāja-śekhara's *Karpūramañjarī*.²⁰³

DHĀTUMAÑJARĪ, anonymous.²⁰⁴

DHĀTUMAÑJARĪ by Sadāśiva.²⁰⁵

DHĀTULAKṢAṆA, ascribed to Nārada.²⁰⁶

DHĀTUMĀRAṆA.²⁰⁷

DHĀTUNIDĀNA.²⁰⁸

DHĀTUPADDHATĪ.²⁰⁹

DHĀTUPADHĀTUBHĀSMAKRIYĀ.²¹⁰

DHĀTUPARĪKṢĀ.²¹¹

DHĀTUPRAKARAṆA.²¹²

DHĀTURASĀYANA.²¹³

DHĀTURATNAMĀLĀ, anonymous.²¹⁴

DHĀTURATNAMĀLĀ by Devadatta, son of Hari.²¹⁵ This text is sometimes regarded as forming part of the *Aśvinīkumārasaṃhitā*.²¹⁶ It describes in 184 verses the characteristics (lakṣaṇa), purification, killing, and medicinal properties (guṇa) of the dhātus and upadhātus.²¹⁷ The substances dealt with are: raupya, hema, tāmra, nāga, vaṅga, ayas or loha, kharpara,²¹⁸ abhraka, mauktika,²¹⁹ pravāla, tālaka, śilā, māṅṣika, gandhaka, sūta (mercury), and hīraka.

Noteworthy is the distinction of four types of loha (58–59ab: brāhma = vāḍava, kṣatriya, vaiśya = kāntaloha, śūdra = maṇḍūra), two types of kharpara (81: jasada = zinc, and sattvaka), three types of abhraka (89: nāga, vajra, dardura),²²⁰ two types of mauktika (113: sāmodra and hastikumbhaka), and two types of gandhaka (136: guṇika and amlasāraka).

A vernacular term used by the author is sera.²²¹ Noteworthy names of plants are gajavāruṇī (151), kalajātikā (153), tilvaṇī (152), and sārapuṣpā (152).

The *Dhāturatnamālā* is one of the sources of the *Pāradasaṃhitā*, which quotes it.

The treatise is assigned to the fourteenth,²²² sixteenth,²²³ eighteenth,²²⁴ or nineteenth century.²²⁵ One of the MSS²²⁶ dates, however, from A.D. 1660/61.

DHĀTURATNĀVALĪ.²²⁷

DHĀTURATNĀVALĪ by Siddhadeva.²²⁸

DHĀTUŚODHANA.²²⁹

DHĀTUŚODHANA or *Candracakorikā*.²³⁰

DHĀTUŚODHANA by Mallinātha.²³¹

DHĀTUŚODHANAMĀRAṆAVIDHI.²³²

DHĀTUŚODHANAPRAKRIYĀ.²³³

DHĀTUŚUDDHI.²³⁴

DHĀTUŚUDDHIPRAKARAṆA:²³⁵ a work dealing with the purification of various substances in order to make them suitable to be used in medicinal preparations.²³⁶

DHĀTŪTPATTĪ by Ṭhakkura Pherū.²³⁷ This treatise, written in Prakrit, consists of fifty-seven verses. The subjects are: pittali or pittala (6–7); tambaya (= tāmra; 8–10); sīsaya (= sīsa; 11–13); raṅgaya (= raṅga; 14); kaṃsa(ya) (= kāṃsya; 15); pārada (16–19); hiṅgulaya (= hiṅgula; 20–22); sindūra (23–27); the worship of dakṣiṇāvartaśaṅkha,²³⁸ rudrākṣa and śāligrāma (28–44); karpūra (45–46); āgara (= āguru; 47–50); candana (51–54); mṛganābhi (musk; 55); kuṅkuma (56); dhūpas (perfumes; 57).

Amber (kaharavva) was known to Ṭhakkura Pherū.²³⁹

The *Dhātūtpattī* may be an extract from Ṭhakkura Pherū's *Bhūgarbhaprakāśa*, a work on mining and metallurgy.²⁴⁰

DHĀTUVĀDA.²⁴¹

DHĀTUVĀDA(-UPADEŚA)²⁴² by Na-li.²⁴³ This short treatise, lost in the original Sanskrit, was translated into Tibetan under the title of *Gser-hgyur-gyi rci(-hi gdam-pa)*.²⁴⁴ It forms part of the Rgyud-hgrel (Tantravṛtti) section of the Tanjur.

The *Dhātuvāda*²⁴⁵ describes in fourteen verses methods to transmute base metals into gold. One of the substances employed is mahāmāṃsa (śa-chen).²⁴⁶ Kuṣṭha (ru-rta), which grows in the Himālaya, is depicted as a plant from the leaves of which drips a fluid having the colour of gold.

DHĀTUVĀDAPRAKARAṆA by Soma. This is a treatise in Prakrit, consisting of twenty-five verses, forming an appendix to Soma's *Ratnaparīkṣā*, and giving an account of the transmutation of copper into gold. It may date from the fourteenth century.²⁴⁷

DIVYARASENDRASĀRA by Dattātreyā.²⁴⁸

DIVYARASENDRASĀRA by Dhanapati.²⁴⁹

DIVYAUŚADHĪKALPA.²⁵⁰

DIVYAUŚADHIPRAKARAṆA.²⁵¹

DIVYAUŚADHYADHIKĀRA by Govindācārya.²⁵²

DVĀDAŚĀRTHANIRŪPAṆA by Bāhaṭācārya.²⁵³

GANDHAKABHṚṆGARĀJAKALPA.²⁵⁴

GANDHAKAKALPA:²⁵⁵ said to form part of chapter twenty-eight of the *Rudrayāmala*,²⁵⁶ and to deal with the medical properties of sulphur and the preparation of

medicines from it;²⁵⁷ it is one of the sources of the *Pāradasamhitā*.

GANDHAKAKALPĀDISAMGRAHA.²⁵⁸

GANDHAKALPA.²⁵⁹

GANDHAKARASĀYANA.²⁶⁰

GANDHAKASATTVA.²⁶¹

GANDHAKAVARJYATĀNIRŪPA.²⁶²

GĀṄGĀDHARARASAVIDHI.²⁶³

GAURĪKĀNCALIKĀTANTRA.²⁶⁴

This treatise, in the form of a dialogue between Īśvara and Devī,²⁶⁵ consists of 355 verses.²⁶⁶ Subjects dealt with are:²⁶⁷ kālajñāna (24–79); ṛtubheda (81–87);²⁶⁸ citrakalpa (88–92);²⁶⁹ maṇḍūkapaṇīkalpa (93–95);²⁷⁰ punarnavākalpa (96–100);²⁷¹ nirguṇḍīkalpa (101–120);²⁷² hastikarṇakalpa (121–137);²⁷³ śvetārkaḥkalpa (138–150);²⁷⁴ bhṛṅgarājākalpa (151–154);²⁷⁵ kāchalākalpa (155);²⁷⁶ amlaṇīkalpa (156–157);²⁷⁷ śālmalīkalpa (158–167); abhayākalpa (168–172); the treatment²⁷⁸ of jvara (180–200), bahumūtra (201–202), mūtrakṛcchra (203–205), bindu(sṛāva)kṣaya (a deficient amount of ejaculated semen; 206–209), kuraṇḍa and galagaṇḍa (210–214), bhagandara (215), kāmālā (216), vaivarṇya (217),²⁷⁹ kāsa and śvāsa (218–220), yakṣman and kṣaya (221–223), nāsāraktasrava (nosebleeds; 224), arśas (225–226), karṇaśūla (227–229), netraroga (230–233), śīroroga (234–235), dantaroga (237–239), atisāra (240–242), śūla (243–246),²⁸⁰ vicarcikā (247), kuṣṭha (248–254), plīharoga (255), visphoṭaka (256–257), arbuda (258), agnidagdha (259–260), ślīpada (261–263), nidrākṣaya (insomnia; 264–266), and nidrā (267–271); adṛśya (making oneself invisible; 272–275); nidhidarśana (the discovery of hidden treasures; 276–277); dehadurgandha (the removal of a bad bodily smell), kānti, puṣṭi, etc. (283–290); vaśīkaraṇa, mohana, vājīkaraṇa, stambhana, etc. (309–355).

The *Gaurīkāncalikātāntara* is quoted in Jñārasarāmaśarma's *Anupānadarpaṇa*.

The treatise is sometimes said to belong to the sixteenth century.²⁸¹

GOVINDASIDDHĀNTA.²⁸²

GUṬIKĀRASACIKITSĀ.²⁸³

HARISIDDHĀNTA.²⁸⁴

HARĪSVARATANTRA.²⁸⁵

HIṆGULAPRAKARAṆA by Vinayasāgara Upādhyāya.²⁸⁶

JĀRAṆAMĀRAṆĀDI.²⁸⁷

JVARANIVĀRAṆABHASMAVIDHĀNA.²⁸⁸

JVARĀṆKUŚASAMJIVANARASĀDI.²⁸⁹

JVARĀṆKUŚAVIDHĀNA.²⁹⁰

KĀDAMBAKAKALPA by Īśvara.²⁹¹

KAILĀSAKĀRAKA: a work in the form of a dialogue between Śiva and Pārvaṭī, dealing with the purification of mercury and its uses in medicinal preparations.²⁹²

KALPADRUMASĀRASAMGRAHA by Jayarāmagiri, pupil of Caitanyagiri: a work on mercurial preparations in a mixture of Sanskrit and Hindi.²⁹³

KĀMADHENUTANTRA.²⁹⁴

KANAKASINDŪRARASAVIDHI.²⁹⁵

KĀPĀLIKATANTRA.²⁹⁶ Kāpālika is mentioned as one of the Rasasiddhas in Caturbhujā's commentary on the *Rasahrdaya* (1.7), the *Pāradasamhitā* (1.98), *Rasaratnākara*,²⁹⁷ *Rasaratnasamuccaya* (1.4; 6.52), and *Rasataraṅgiṇī* (1.29–32); he is ■ Mahāsiddha in Svātmārāma's *Hathayogapradīpikā* (1.8).²⁹⁸ One of the sixty-four Siddhas, Kāhnūpāda or Kṛṣṇapāda, pupil of Jālandharanātha, called himself Kāpālika.²⁹⁹

Kāpālikeyogas are repeatedly described in the *Rasārṇava*.

KĀPĀLISIDDHĀNTA.³⁰⁰ Kāpāli(n) is mentioned in the *Ratnākaraśadhayogagrantha*, Revanasiddha's *Virabhaṭṭīya*, the *Sarvadarśanasamgraha*, and the *Vaidyaśāstrapravartakācāryaṇāmāsamuccaya*. Kāpālin forms part of the group of Rasasiddhas in Caturbhujā's commentary on the *Rasahrdaya* (1.7), the *Pāradasamhitā* (1.96) and the *Rasaratnasamuccaya* (1.2); he is one of the Mahāsiddhas in Svātmārāma's *Hathayogapradīpikā* (1.7). Kāpāli is a Rasasiddha in the *Raseśvarasiddhānta*.³⁰¹ Kāpālin is credited with the *Rasarājamahodadhī*.

Kāpālin, Kāpālin, Kāpāli and Kāpālika may designate one and the same person.³⁰²

G. Hāldār regards Kāpāli as a Śaka king, who was the son of Vāsudeva and teacher of Kandalāyana;³⁰³ he places him in the second or third century.³⁰⁴

KHAṆḌASIDDHĀNTA.³⁰⁵ Khaṇḍa is one of the Rasasiddhas in the *Pāradasamhitā*, *Rasajalanidhi*, *Rasaratnākara*, and *Rasaratnasamuccaya*. Caturbhujā's commentary on the *Rasahrdaya* (1.7) mentions Khaṇḍin instead of Khaṇḍa as a Rasasiddha. The *Hathayogapradīpikā* (1.8) refers to Khaṇḍa as one of the Mahāsiddhas.

KHECARĪVIDYĀ, ascribed to Ādinātha.³⁰⁶ This small treatise in four chapters and 285 verses begins with praising itself (1.1–28), followed by an account of the khecarīmantra (1.29–40); the remaining part of chapter one is devoted to the preparations for and practice of the khecarīmudrā (1.41–74).³⁰⁷ Chapter two, the longest, describes the siddhis, the subtle body, the cakras, etc.; a portion of this chapter (2.81–97) deals with the effects of Hathayoga practices on the doṣas. Chapter three discusses the raising of the Kuṇḍalinī, her union with Śiva, and the realization by the practitioner of bodily liberation. Chapter four is about divine herbs (divyauśadhi), necessary for the attainment of siddhis, and on the consumption of mercury, sulphur, realgar and orpiment.

The *Khecarīvidyā* calls itself in its colophons a portion of a treatise called *Mahākālayogaśāstra*.³⁰⁸ A work of this title is referred to by two mediaeval commentators³⁰⁹ as concerned with Hathayoga. The *Khecarīvidyā* itself is cited by works called *Mahākāla* and *Mārtandaivēka*. The latter is the *Yogamārtanḍa* or *Vivekamārtanḍa* of Gorakṣanātha; the former, if not the *Mahākālayogaśāstra* itself, may be the *Mahākālasamhitā*, at-

tributed to Ādinātha.³¹⁰

The first chapter of the *Khecarīvidyā* is often reproduced as the second chapter of the *Yogakūṇḍalyupaniṣad*.³¹¹

Since three verses of the *Khecarīvidyā* are reproduced in the fifteenth-century *Haṭhayogapradīpikā* of Svātmārāma, the former may date from the fourteenth century.

KRAVYĀDIRASANIRMĀNAVIDHI.³¹²

KRTRIMARASAYOGAVICĀRA.³¹³

KUBJIKĀMATATANTRA.³¹⁴ This Tantra contains a passage in which Śiva himself speaks of mercury (pāra) as his generative principle; he eulogizes the efficacy of this substance when killed six times. The transmutation of copper into gold, with the aid of mercury, is alluded to. Various alchemical processes are referred to.³¹⁵

The Kulālikāmnāya version³¹⁶ contains a list of aṣṭas (23.15c–43) and material of medical interest on conception, embryology, the structure of the human body, the series of dhātus, etc.³¹⁷

The oldest MS used for the critical edition of the Kulālikāmnāya version was completed during the reign of Rāmapāla (A.D. 1077–1120); another MS dates from A.D. 1134–1135.³¹⁸ The oldest available MS of the *Kubjikāmata* dates from the reign of king Lakṣmīkāmādeva (A.D. 1024–1040); it contains the version called Laghvīkāmāya.³¹⁹

The place and date of origin of the Kubjikā cult³²⁰ and the region where the *Kubjikāmātatantra* was composed³²¹ are disputed issues.

LAGHURATNAPARĪKṢĀ.³²²

LAMPAṬATANTRA.³²³ Lampāṭa is one of the Rasasiddhas in the *Rasaratnākara*.³²⁴ Some treatises change his name into Lampaka³²⁵ or Lambaka.³²⁶

The LAUHAPRADĪPA, a work by Trivikrama,³²⁷ is a treatise in four chapters (pariccheda) on the medicinal use of inorganic substances. The titles of the chapters are: (1) lauhasya saṁskārāḥ, (2) upacārāḥ, (3) lauhayogānāṁ saṁgrahaḥ, (4) guṇalakṣaṇanirdeśo lauhānām.³²⁸

The introductory stanzas refer to the following sources: Jīvanātha, Nāgārjuna, Patañjali,³²⁹ and Vindhyasahasnamuni.

The work contains quotations, which are sometimes very long, from Amoghācārya, Bhojarāja's *Āyurvedasarvasva*, Jīvanāthācārya, Nāgabuddhīnghanṭu, Nāgārjuna, Pātañjalatantra, Patañjali, Vaṅgasena, Vindhyavāsin,³³⁰ and Yogaratnākara;³³¹ lauhācāryas and other lauhasāstras are also cited.³³²

Trivikrama is quoted by Āsubodha and Nityabodha Senagupta in their commentary on the *Rasaratnasamuccaya*, Gopāladāsa,³³³ Govindasena,³³⁴ Kāśīrāma,³³⁵ Mādhava in his *Āyurvedaprakāśa*, the author of glosses on Nityanātha's *Rasaratnākara*,³³⁶ Śivadāsa,³³⁷ and in the *Rasendracintāmaṇi*.³³⁸

The *Lauhapradīpa* is cited in Āsubodha's commentary on Govindasena's *Paribhāṣapradīpa*³³⁹ and in an anonymous *Sārīra*.³⁴⁰

Trivikrama was probably a resident of Bengal³⁴¹ and may have lived in the twelfth or thirteenth century since he is later than Vaṅgasena and earlier than Gopāladāsa.³⁴²

LOHABHASMAGUṆOPAYOGAVICĀRA.³⁴³

LOHAPRABHEDANIRŪPAṆA.³⁴⁴

LOHAPRADĪPA.³⁴⁵

LOHAPRAKARAṆA.³⁴⁶

LOHARATNĀKARA.³⁴⁷

LOHĀRNAVA.³⁴⁸

The LOHASARVASVA or *Lohapaddhati* was written by Sureśvara, also called Surapāla.³⁴⁹

The *Lohasarvasva*³⁵⁰ treats, in 318 stanzas, of lohas and their medicinal uses.³⁵¹ The author announces that, though eight lohas are known, four only will be dealt with in his work, namely iron, mica, gold, and copper (7cd–9ab). The origin, characteristics, purification and killing of iron (loha; 9cd–70),³⁵² mica (abhraka; 71–101), gold (suvarṇa; 102–115), and copper (tāmra; 116–125) are described. The extraction of the essence (sattvapātana) of mica (abhraka) and the killing of this essence are also discussed (81–101).

Eight types of iron are distinguished: sāra, auḍra, kalingaja, bhadra, vajra, pāñḍi, kāntaja, and nīrava (12cd–20ab). The vegetable and mineral substances used in the killing of iron³⁵³ and in various putapākas are enumerated (25–29).

Some useful mantras are mentioned (134–138), followed by a list of anupānas (139–151) and dietary and behavioural rules to be observed after taking inorganic medicines (152–166).

Sureśvara proceeds with a series of formulae. Preparations containing one loha come first (loha: 170–216; abhraka: 217–226; suvarṇa: 227–234; tāmra: 235–238), followed by those containing two (239–276), three (277–297), and four lohas (299–300).

In spite of the assertion that four lohas only would be considered, the work ends with preparations containing five and more lohas, up to eight (301–316).³⁵⁴

Sources referred to by Sureśvara are: the *Lohatantras* of Hārīta, Nāgārjuna, Suśruta and Vyāḍi (6; 23).

The *Lohapaddhati* or *Lauhapaddhati* is quoted in the *Rasakāmadhenu*, Guṛā-jśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, and Ṭoḍara's *Āyurvedasaukhyā*.³⁵⁵ The *Lohasarvasva* is cited in Guṛā-jśarmamiśra's *Viśikhānupraveśavinīṇa*. The work is mentioned as one of the sources of the *Pāradasaṁhitā*, *Rasayogasāgara*³⁵⁶ and Yādavjī Trikamī Ācārya's *Rasāmṛta*.

Two other works attributed to the same author are the *Śabdapradīpa*, a homonymic dictionary of medical botany in two sections and numerous chapters,³⁵⁷ and the *Vṛkṣāyurveda*, a work on arboriculture.³⁵⁸

Sureśvara³⁵⁹ or Surapāla³⁶⁰ was a court-physician (bhiṣagantaraṅga) to king Bhīmapāla. His father Bhadreśvara³⁶¹ held the same office under king Rāmapāla

(A.D. 1078–1120)³⁶² and his great-grandfather Devagaṇa under Govindacandra.³⁶³ His grandfather, Yaśodhana, was not a medical practitioner.³⁶⁴

Irrespective of the identity of Bhīmapāla,³⁶⁵ Sureśvara, the son of the court-physician to Rāmapāla, must have lived in the first half of the twelfth century.³⁶⁶

LOHAŚĀSTRA.³⁶⁷

LOKOTTARARASAVIDHĀNA.³⁶⁸

MADANAKĀMEŚVARAYOGA by Satyanātha.³⁶⁹

MADANAKĀMEŚVARĪNIRMĀNAVIDHI.³⁷⁰

MAHĀDBHUTARASATANTRA by Virabhadra.³⁷¹

MAHĀDEVARASATANTRA by Kārttikeya.³⁷²

MAHĀDEVATANTRA.³⁷³

MAHĀPŪRṆACANDRODAYA by Pūjyapāda.³⁷⁴

MAHĀPŪRṆACANDRODAYAYOGA.³⁷⁵

MAHĀRĀJAMṚGĀṆKA.³⁷⁶

MAHĀRASĀṆKUŚA by Rasāṅkuśa.³⁷⁷ Rasāṅkuśa is one of the Rasasiddhas in the *Pāradasaṃhitā* (1.99) and *Rasaratnasamuccaya* (1.5). Rasāṅkuśa is an author or the title of a work quoted by Ṭoḍara.

MAHĀRASAPRAKARAṆA.³⁷⁸

MAHĀRASĀYANATANTRA.³⁷⁹

MAHĀRASĀYANAVIDHI.³⁸⁰

MAHĀSINDŪRARĀJAMṚGĀṆKASŪRYAPRABHĀVATARASAVIDHĀNA.³⁸¹

MAHODADHI by Śivanātha Yogin.³⁸²

MAKARADHVAJĀDIRASAVIDHI.³⁸³

MAKARADHVAJARAHAŚYA.³⁸⁴

MAṆIKALPA by Mān Tuṅgasūri, who may have lived in the thirteenth century: a treatise on precious stones in 225 verses.³⁸⁵

MĀṆIKARATNAPARĪKṢĀ.³⁸⁶

MAṆIMĀHĀTMYA or *Maṇiparīkṣā*.³⁸⁷

MAṆIMĀLĀ by Sourindro Mohun Tagore.³⁸⁸ This treatise, entirely in verse, deals, after some introductory verses, with the following gems: the mythical jewel called syamantaka (9–72); vajra (diamond; 73–151);³⁸⁹ māṇikya (ruby; 152–219);³⁹⁰ vaidūrya (cat's eye; 220–242);³⁹¹ muktā (pearl; 243–329);³⁹² gomeda (zircon; 330–337);³⁹³ vidrūma (coral; 338–356);³⁹⁴ marakata (emerald; 357–387);³⁹⁵ puṣparāga (topaz; 388–396);³⁹⁶ indranīla (sapphire; 397–424);³⁹⁷ karketana (chrysoberyl; 425–429);³⁹⁸ pulaka (garnet; 430–432);³⁹⁹ rudhirākhyā (carnelian; 433–434);⁴⁰⁰ sphaṭika (quartz; 435–444);⁴⁰¹ bhīṣma (rock crystal; 445–452).⁴⁰²

Many gems⁴⁰³ are divided into four types, named after the four varṇas (brāhmaṇa, kṣatriya, vaiśya, śūdra).

Sources are not indicated.⁴⁰⁴ King Soma is referred to as an authority on diamonds (120). A sage called Kara is also quoted (349).

MAṆIPARĪKṢĀ.⁴⁰⁵

MAṆIPARĪKṢĀKALPA.⁴⁰⁶

MANTHĀNABHĀIRAVA by Manthānabhairava.⁴⁰⁷

Manthānabhairava is quoted or mentioned in Dattarāma's *Bṛhadrasarājasundara*,⁴⁰⁸ Lakṣmīrāma's commentary on the *Siddhabhṛṣajamaṇimālā*, the *Rasendracūḍāmaṇi*,⁴⁰⁹ Ṭoḍara's *Āyurvedasaukhyā*, and Trimalla's *Yogatarāṅgiṇī* and *Bṛhadyogatarāṅgiṇī*.

He is mentioned as one of the Rasasiddhas in Caturbhūja's commentary on the *Rasahrdaya* (1.7), the *Pāradasaṃhitā* (1.99), *Rasajalanidhi* (III, 389–390), *Rasaratnasamuccaya* (1.6), *Rasatarāṅgiṇī* (1.29–32), and *Rasendrasambhava* (introductory verses). Manthāna is a Mahāsiddha in Svātmārāma's *Haṭhayogapradīpikā* (1.6).

Formulae ascribed to Manthānabhairava are found in the *Bhaiṣajyaratnāvalī*,⁴¹⁰ *Bhāratabhāṣajyaratnākara*,⁴¹¹ *Rasaratnasamuccaya*,⁴¹² *Rasayogasāgara*,⁴¹³ *Rasendracintāmaṇi*,⁴¹⁴ and *Yogaratnākara*.⁴¹⁵

MĀTRKĀBHEDATANTRA.⁴¹⁶ This treatise, consisting of 573 verses, arranged in fourteen chapters (paṭala), and composed in the form of a dialogue between Śaṃkara and Caṇḍikā, contains, though chiefly devoted to spiritual practices of a Tantric nature, some interesting matter pertaining to alchemy and medicine.⁴¹⁷

The work describes the transmutation of copper into silver by the aid of an unknown substance called sambala (1.2–16), processes to which mercury and copper are subjected, aurification, and the beneficial effects of ingesting mercurial products (5.1–43), the preparation of the rasaliṅga (8.1–37), the reduction of minerals to ashes and the use of these ashes as drugs (9.1–31).

Some of the titles of the chapters (paṭala) in a MS described by R. Mitra are: *raupyanirmāṇopāyakathana* (1), *saṃtānotpattiniyamakathana* (2), *mokṣasādhana* (3), and *pāradabhasmīkaraṇopāyatadbhasmamāhātmyakathana* (5).⁴¹⁸

A *Cīnatātra* (1.7),⁴¹⁹ *Kālitantra* (1.7),⁴²⁰ and *Ṭoḍalatantra* (8.18)⁴²¹ are referred to.

A number of correspondences with Nāthasiddha texts may point to the eleventh or twelfth century as the period of composition.⁴²² D.G. White is of the opinion that the *Mātrkābhēdatantra* is a relatively late text, probably dating from the latter part of the thirteenth century.⁴²³

The *Mātrkābhēdatantra* is quoted in Ambikādattaśāstrin's commentary on the *Rasendrasārasaṃgraha* and the commentary on the *Rasaratnasamuccaya* by Āśubodha and Nityabodha Senagupta.

MṚDĀNĪTANTRA.⁴²⁴

MŪṢĀLEPAVIDHI.⁴²⁵

NĀGABODHISIDDHĀNTA.⁴²⁶

NĀGĀRJUNĪVIDYĀ.⁴²⁷
 NANDĪTANTRA.⁴²⁸
 NĀSATYASAMHITĀ.⁴²⁹
 NAVAGRAHARASA.⁴³⁰
 NAVARATNA.⁴³¹
 NAVARATNADHĀTUVIDYĀ.⁴³²
 NAVARATNADHĀTUVIVĀDA by Balabhadra.⁴³³
 NAVARATNAMĀLĀ, anonymous.⁴³⁴
 NAVARATNAMĀLĀ by Mallinātha, son of Govinda.⁴³⁵

NAVARATNAPARĪKṢĀ by Nārāyaṇa Paṇḍita.⁴³⁶ This treatise, which forms part of the author's *Smṛtisāroddhāra*,⁴³⁷ deals with: vajra (36–57), muktāphala (58–106), padmarāga (107–125), indranīla (126–140), marakata (141–152), sphatika (153–158), puṣyarāga (159), vaiḍūrya (160), and pravāla (162–165); the work ends with verses on artificial gems and ways of detecting them (174–183).⁴³⁸

NAVARATNAPARĪKṢĀ by Soma.⁴³⁹ The author is said to be the Somadeva who compiled the *Mānasollāsa*, of which work the text of the *Navaratnaparīkṣā* forms part.⁴⁴⁰

NAVARATNARĀJAMRGĀNKASIDDHARASANIRMĀṆA.⁴⁴¹
 NAVARATNAŚUDDHI.⁴⁴²
 NIDHIDARŚANA by Rāmavajapeyin.⁴⁴³
 NITYANĀTHATANTRA.⁴⁴⁴ This work may be the same as Nityanātha's *Rasaratnākara*.
 PAÑCABĀṆAMODAKANIRMĀṆAVIDHI.⁴⁴⁵
 PĀRADAJĀRAṆAMĀRAṆĀDIVIDHI.⁴⁴⁶

PĀRAKALPA:⁴⁴⁷ the twenty-eighth chapter of the *Rudrayāmala*,⁴⁴⁸ dealing with the medicinal properties of mercury and the preparation of mercurial medicines.⁴⁴⁹

PĀRAKALPADRUMA by Ananta, written in A.D. 1792.⁴⁵⁰
 PĀRADANĀMA.⁴⁵¹
 PĀRADASAMHITĀ by Cittoḍbhava Haṃsarāja.⁴⁵²
 PĀRADAŚODHANĀVIDHI.⁴⁵³
 PĀRADĀṢṬĀDAŚASAMSKĀRA, anonymous.⁴⁵⁴
 PĀRADĀṢṬĀDAŚASAMSKĀRA by Kṛṣṇarāvanarasimha.⁴⁵⁵
 PĀRAVIDHI.⁴⁵⁶

PĀRADAYOGAŚĀSTRA by Śivarāmayogīndra,⁴⁵⁷ a work in 262 verses and eleven chapters (pāṭala), dealing with processes of making mercurial preparations for medicinal purposes, for conferring longevity, and for converting base metals into gold.⁴⁵⁸ Mentioned as one of the sources of the *Rasayogasāgara*.⁴⁵⁹

This work is sometimes assigned to the sixteenth century.⁴⁶⁰

PĀṢĀṆABHASMAVIDHĀNA.⁴⁶¹

PĀṢĀṆAŚUDDHIKRAMA.⁴⁶²
 PRAMADEBHĀNĀKUŚARASAVIDHI.⁴⁶³
 PRĀṆĀNĀKUŚARASAVIDHI.⁴⁶⁴
 PRATĀPALAṆKEŚVARARASA.⁴⁶⁵
 PRATĀPALAṆKEŚVARĪNIRMĀṆACIKITSĀVIDHĀNA.⁴⁶⁶
 PRAYOGACINTĀMAṆI by Rāmamāṇikyasena.⁴⁶⁷
 PŪRNACANDRODAYARASAVIDHĀNA.⁴⁶⁸
 PURUṢĀRTHAPRABODHA.⁴⁶⁹
 RĀJAMRGĀNKAVYĀKHYĀ.⁴⁷⁰
 RĀJARATNĀKARA by Dhunḍhirāja, son of Vīreśvara alias Pante Bhaṭṭa.⁴⁷¹
 RAJATABHASMAVIDHĀNA.⁴⁷²
 RAJATASUVARṆAKARAṆAKRIYĀ.⁴⁷³

RASABHAIRAVA by Bhairava.⁴⁷⁴ Bhairava is one of the Rasasiddhas; several rasayogas are attributed to him. He is also credited with the *Gaurikāñcalikātantra* and *Rasendrabhairava*.

RASABHAṢAJYAKALPADĪPIKĀ.⁴⁷⁵
 RASABHAṢAJYARATNĀVALI by Sūryakavi.⁴⁷⁶
 RASABHASMANIRMĀṆAKRAMA.⁴⁷⁷
 RASABHASMASĀDHANA.⁴⁷⁸
 RASABHASMAVIDHI.⁴⁷⁹

RASABHEṢAJAKALPA⁴⁸⁰ or *Rasabheṣajakalpadīpikā*⁴⁸¹ by Sūryapaṇḍita. Subjects dealt with are: furnaces, fuels, kinds of earth, processing of mercury, the purification of medicinal substances, perfumed oils, diet.⁴⁸²

RASABHOGAMUKTĀVALĪ.⁴⁸³
 RASABHŪPATI.⁴⁸⁴
 RASABODHACANDRODAYA.⁴⁸⁵ Used as a source in the *Rasayogasāgara*.⁴⁸⁶

RASACAKRA by Bṛhaspati.⁴⁸⁷ This work, in 8,000 verses, is mentioned in the *Gorakṣasamhitā*.⁴⁸⁸

RASACAKRACŪḍĀMAṆI.⁴⁸⁹

RASACANḌĀMŚU or *Rasaratnasamgraha* by Datta Ballāla Borakara, also called Datta Vaidya, a Sārasvata brāhmaṇa, son of Ballāladeva and Lakṣmī. This work is a modern compilation, taken from the *Rasaprakāśāsudhākara*, *Rasaratnākara*, *Rasaratnasamuccaya*, etc.; it was completed in A.D. 1919. It consists of two parts (khaṇḍa), the first of which deals with śodhana, māraṇa, etc., of the rasas, uparasas, dhātus, upadhātus, etc., while the second one contains formulae to be used in the treatment of various disorders.⁴⁹⁰

RASACANḌĀMŚU by Dattarāma Vaidya.⁴⁹¹

RASACANḌĀMŚU by Dattātreyā.⁴⁹² Used as a source in the *Bheṣajasaṃhitā*, *Rasayogasāgara*,⁴⁹³ and *Rasendrasambhava*.

A *Rasacanḍāmśu* is quoted in the *Āyurvedīya Khanijavijñāna*, *Kūpīpakvarasanimānavijñāna*, and *Rasadhātuprakāśa*.

The disease called smaronmāda was known to the author of this work,⁴⁹⁴ which points to a rather late date.⁴⁹⁵

RASACANḌĀMŚU by Śrīsaṃkara.⁴⁹⁶

RASACANDRATANTRA by Bṛhaspati.⁴⁹⁷

RASACANDRIKĀ, anonymous.⁴⁹⁸

RASACANDRIKĀ by Mādhava Kavicandra.⁴⁹⁹

RASACANDRIKĀ by Nīlāmbara Purohita.⁵⁰⁰

RASACANDRODAYA by Candrasena.⁵⁰¹

RASACIKITSĀGRANTHA.⁵⁰²

RASACINTĀMAṆI, anonymous.⁵⁰³

RASACINTĀMAṆI by Anantadeva⁵⁰⁴ or Anantadevasūri,⁵⁰⁵ a work in about 900 verses, arranged in eleven chapters.⁵⁰⁶

The subjects of chapters (stavaka) one to six are:⁵⁰⁷ (1; 120 verses) twenty methods of preparing rasabhasman, gandhakagrāsa, the preparation of various guṭikās; (2; 142 verses) the formulae and uses of seventeen rasayogas; (3; 98 verses) the treatment of kuṣṭha; (4; 128 verses) the treatment of śoṭha and some other disorders; (5; 162 verses) the saṃskāras of mercury; (6; 146 verses) auri- and argentifaction, rasāyana and vājīkaraṇa; (7; 213 verses) eighteen rasayogas; (8; 182 verses) sixteen rasayogas; (9; 198 verses) forty-one rasayogas; (10; 45 verses) thirteen rasayogas; (11; 138 verses) thirty-three rasayogas.

The verses quoted by P. Rāy are concerned with the preparation of a white mercurial bhasman, the extraction of the sattva of rasaka or kharpara (i.e., the preparation of zinc) and tutthaka, and the preparation of artificial gold and silver.⁵⁰⁸

Works quoting the *Rasacintāmaṇi* are: *Aṣṭamahāmātrā*,⁵⁰⁹ *Āyurvedaprakāśa*, Govindarāma's *Rasasaṃgrahasiddhānta*,⁵¹⁰ Gulrājśarmamiśra's *Viśikhānupraveśavijñāna* and commentary on the *Āyurvedaprakāśa*, *Kūpīpakvarasanimānavijñāna*, Rāmacandra's *Rāmaavinoda*,⁵¹¹ *Rasadhātuprakāśa*, *Rasakāmadhenu*, Sadānanda's *Rasatarāṅgiṇī*, *Rasatattvavivecana*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, Ṭoḍara's *Āyurvedasaukhya*,⁵¹² and Trimalla's *Yogatarāṅgiṇī*⁵¹³ and *Brhadyogatarāṅgiṇī*.⁵¹⁴ The *Rasacintāmaṇi* of Anantadeva was one of the sources of the *Rasayogasāgara*.⁵¹⁵ The *Rasacintāmaṇi* is also mentioned among the sources of the *Pāradasaṃhitā*. The work is anonymously quoted in the *Rasajalanidhi*.

A *Cintāmaṇi*, quoted by Ṭoḍara, may or may not be the *Rasacintāmaṇi*.⁵¹⁶

Anantadeva was a resident of Kanakācala⁵¹⁷ and a devotee of Tripurasundarī.⁵¹⁸

The quotations establish that Anantadeva is earlier than Ṭoḍara.⁵¹⁹

RASACINTĀMAṆI by Muralīdhara Śarman.⁵²⁰

RASACINTĀMAṆI by Padmaṇapaṇḍita.⁵²¹

RASADARPAṆA, anonymous.⁵²² An unspecified *Rasadarpaṇa* is quoted in one of the paśiṣṭas of the *Anandakanda*,⁵²³ the *Āyurvedīya Khanijavijñāna*, the *Bṛhadrasarajasundara*, Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Kūpīpakvarasanimānavijñāna*, *Rasatattvavivecana*, *Rasendrapurāṇa*, Ṭoḍara's *Āyurvedasaukhya*,⁵²⁴ and Trimalla's *Yogatarāṅgiṇī*. A *Rasadarpaṇa* is referred to in Revāṇasiddha's *Vīrabhaṭṭīya*.

RASADARPAṆA by Revāṇasiddha.⁵²⁵ A *Rasadarpaṇa*, quoted in Viṣṇudeva's (= Viṭhala's) *Rasasindhu*, is probably Revāṇasiddha's work, because Trimalla, who also wrote a *Rasadarpaṇa*, is much later than Viṣṇudeva. Revāṇasiddha may therefore be earlier than the third quarter of the fourteenth century.

RASADHĀTUPRAKĀŚA by Vaidya P.D. Muḷe.⁵²⁶

The forty chapters (adhyāya) of this compilation deal with: (1) rasaśālā; (2) paribhāṣā; (3) vargas (groups of substances); (4) yantras; (5) types of mūṣā and mudrā; lepa; types of koṣṭhī; (6) types of puṭa; (7) kāñjī; (8) māna (weights and measures); (9) pāradotpatti (the origin of mercury), the doṣas (blemishes) of mercury; (10) pāradaśuddhi (the purification of mercury) and the saṃskāras; (11) gandhakajāraṇa, hiṅgulothapāradaniḥsāraṇavidhi (the extraction of mercury from cinnabar); (12) mūrchanā; (13) nirgandhamūrchanā: mugdharasa, rasakarpūra; (14) sagandhamūrchanā: kajjalī, rasasindūra, candrodaya; (15) kajjalī, parpaṭī; (16) suvarṇajāraṇa; (17) rasabandha; (18) pāradabhasman and its uses; (19) lohasiddhi and suvarṇanirmāṇa (aurifaction); (20) the dhātus (metals); (21) suvarṇa (gold); (22) rajata (silver); (23) tāmrā (copper); (24) loha (iron); (25) maṇḍūra; (26) nāga (lead); (27) vaṅga (tin); (28) yaśada (zinc); (29) pittala, kāṃsya, varta; (30) the mahārasas; (31) abhṛaka; (32) vaikrānta; (33) suvarṇamākṣika; (34) tāramākṣika; (35) vimāla; (36) śilājatu; (37) sasyaka; (38) capala; (39) rasaka; (40) the uparasas.

The sources used in compiling this treatise are: *Āyurvedaprakāśa*, *Bhaiṣajyaratnāvalī*, *Bhāratabhaiṣajyaratnākara*, *Bhāvaprakāśa*, *Nighaṇṭurātākara*, *Rasacanḍāmśu*, *Rasacintāmaṇi*, *Rasahrdaya*, *Rasakāmadhenu*, *Rasaprakāśasudhākara*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasatarāṅgiṇī*, *Rasāyanasāra*, *Rasendrasarasamgraha*, *Śāligrāmanighaṇṭu*, *Suśruta*, *Ṭoḍarānanda*, *Viṣatantra*, and *Yogarātākara*.

RASADHĀTUŚODHANAMĀRĀṆA.⁵²⁷

RASĀDHIKĀRA by Harihara.⁵²⁸

RASĀDHYĀYA by Puruṣottamasūri.⁵²⁹

RASĀDĪNĀM MĀRĀṆAJĀRĀNĀDIPRAYOGAḤ. This work is a guide for the purification of mercury and other substances; it is composed in verse and prose.⁵³⁰

RASADĪPA by (Siddha) Prāṇanātha.⁵³¹

RASADĪPAKA.⁵³²

RASADĪPIKĀ, anonymous.⁵³³

RASADĪPIKĀ by Ānandānubhava.⁵³⁴ Ānandānubhava⁵³⁵ and the *Rasadīpikā* are quoted in the *Rasasindhu*, which establishes that the author lived before the third quarter of the fourteenth century. Mentioned as one of the sources of the *Rasayogasāgara*.⁵³⁶

RASADĪPIKĀ by Ananta.⁵³⁷ Quoted in the *Rasakaumudī* of Mādhavabhiṣaj.⁵³⁸ A *Rasadīpikā* is cited in the commentary on the *Aṣṭamahāmātrā*,⁵³⁹ the *Kūpīpakvarasanirmāṇavijñāna*, *Rasasindhu*, Ṭoḍara's *Āyurvedasaukhya*, and Vaidyarāja's *Sukhabodha*.⁵⁴⁰

RASADĪPIKĀ by Rāmarāja.⁵⁴¹ The same author is credited with a *Nāḍīprakāśa* and *Rasaratnapradīpa*.⁵⁴² Quoted in Vaidyacinṭāmaṇi's *Prayogāmṛta*.⁵⁴³

RASĀDIŚUDDHI.⁵⁴⁴

RASĀDIYOGAGRANTHA. This work deals with the purification of mercury and other inorganic substances; a number of medicinal preparations are described.⁵⁴⁵

RASADRUTIPRAKARAṆA.⁵⁴⁶

RASĀDYUTPATTIVARṆANA.⁵⁴⁷

RASAGOVINDA by Govinda.⁵⁴⁸

RASAGRANTHA. This work describes the origin and properties of mercury and its different varieties; its use in medicinal preparations is also indicated.⁵⁴⁹

RASAHEMAN.⁵⁵⁰

RASAHRDAYA, anonymous.⁵⁵¹

RASAJÑĀNA by Jñānajatīs.⁵⁵² Quoted in the *Bhaiṣajyaratnāvalī*⁵⁵³ and *Kūpīpakvarasanirmāṇavijñāna*. The *Rasajñāna* is one of the sources of the *Rasayogasāgara*.⁵⁵⁴ Jñānajatīrmanūndra is referred to in Dattarāma's *Bṛhadarasarājasundara*.⁵⁵⁵

RASAKAKṢĀPUṬA by Nāgeśa, son of Gannirāja of Bhāradvājagotra and Vaikhānasasūtra.⁵⁵⁶ The author gives at the beginning of his treatise a list of the following authorities and works consulted by him: Bhavānī,⁵⁵⁷ Carpaṭi, Dhanvantari, Govinda, Jinendra's *Amṛta*,⁵⁵⁸ *Kākaṇḍeśvarīmata*, Lokanāyaka,⁵⁵⁹ Nāgārjuna, Nirandhra,⁵⁶⁰ Piyūṣa, Rājamrgāṅka, *Rasadīpikā*, *Rasāmṛta*, *Rasarāja*, *Rasaratnākara*, *Rasārnava*, *Rasasattva*, *Rasasiddha*, *Rasendramāṅgala*, *Sutasoma*,⁵⁶¹ Svachchanda, Tārksya,⁵⁶² Vyādi, and Vyāsa.⁵⁶³

RASAKALIKĀ.⁵⁶⁴

RASAKALPA⁵⁶⁵ This work, said to form part of the *Rudrayāmala*, and written in the form of a dialogue between Śiva and Caṇḍikā, describes metals and minerals, their killing, druti, sattvapātana and some other processes, without giving attention to the medicinal uses of the substances produced. The author claims to have tested all the processes outlined in the work. Six metals are distinguished (gold, silver, copper, tin, lead, iron), eight mahārasas (pārada, hīṅgula, vaiṣṇava,⁵⁶⁶ śasyaka, śaila, capala, rasaka, amala),⁵⁶⁷ eight rasas (abhraka, tutthaka, kānta, rājāvarta, añjana, vajra, vaikrāntaka, taṅkana), and an unspecified number of uparasas (gandhaka, tālaka, śilā, kṣiti,⁵⁶⁸ khecara,⁵⁶⁹ gairika, etc.). Sulphur (gandhaka) is said to be of four types (sita, asita, aruṇa, pīta), tālaka of two types (godanta and pāṭalacchavi), śilā of two types (raktā and pītā), kāsisa of three types (kāsisa, puṣpakāsisa, hīrakāsisa), gairika of two types (sauvarṇa and lohita). Kaṅkuṣṭha is not accepted as a rasa. The extraction of the essence of rasaka, i.e., the preparation of zinc, is described.⁵⁷⁰

Svachchandabhairava and Govinda are referred to.⁵⁷¹

The *Rasakalpa* is sometimes placed in the thirteenth century.⁵⁷²

RASAKALPA by Basava.⁵⁷³

RASAKALPADRUMA by Jayadeva.⁵⁷⁴

RASAKALPALATĀ, anonymous.⁵⁷⁵

RASAKALPALATĀ by Kāśinātha.⁵⁷⁶

RASAKALPALATĀ by Magnīrāma,⁵⁷⁷ Magnīrāma,⁵⁷⁸ or Maganīrāma.⁵⁷⁹ Mentioned as one of the sources of the *Rasayogasāgara*.⁵⁸⁰ This work is sometimes assigned to the sixteenth century.⁵⁸¹

RASAKALPALATĀ by Nārāyaṇamiśra⁵⁸² or Nārāyaṇa Śarman.⁵⁸³ This work is sometimes placed in the fifteenth century.⁵⁸⁴

RASAKALPATARU.⁵⁸⁵

RASAKALPAVALLĪ by Śrīkrṣṇasena.⁵⁸⁶

RASAKAṆKĀLĪ by Kaṅkāli.⁵⁸⁷

RASAKAṆKĀLĪYA by Kaṅkālayogin.⁵⁸⁸ This work is one of the sources of the *Rasayogasāgara*.⁵⁸⁹ The *Rasakaṅkāliya* is quoted in the *Kūpīpakvarasanirmāṇavijñāna*.

RASĀKARA.⁵⁹⁰

RASAKARPŪRA.⁵⁹¹

RASAKAṢĀYA by Vaidyarāja, son of Viśārada.⁵⁹²

RASAKAUMUDĪ, anonymous.⁵⁹³ An unspecified *Rasakaumudī* is quoted in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*, the *Kūpīpakvarasanirmāṇavijñāna*, and the *Rasāyanasamgraha*.

RASAKAUMUDĪ by Golhadeva.⁵⁹⁴

RASAKAUMUDĪ by Mādhava.⁵⁹⁵ This work deals with rasayogas employed in medicine; some of the chapters (adhikāra) are concerned with the treatment of jvara, jvarātisāra, grahaṇī, visphoṭa, masūrī, mukharoga, śīrōga, strīroga, bālaroga, and viṣa, as well as with vṛṣya (= vājīkaraṇa); the saṃskāras of mercury and the yantras used are described; some gaṇas are enumerated: niyāmaka-, rasamāraka-, guḍūci-, pañcapitta-, amla-, and kṣāragāṇa.⁵⁹⁶

Mādhava's *Rasakaumudī* is assigned to the sixteenth century, because of its similarity to the *Rasapradīpa* in many respects, while, moreover, opium and mineral acids are prescribed in it.⁵⁹⁷ P. Cordier, who examined a MS of the work, noticed quotations from the *Rasaratnākara* and Ānandānubhava's *Rasadīpikā*.⁵⁹⁸

RASAKAUMUDĪ by Śaktivallabha.⁵⁹⁹ This work is one of the sources of the *Rasayogasāgara*.⁶⁰⁰

RASAKAUMUDĪ by Viṭṭhala.⁶⁰¹

RASAKAUSTUBHA.⁶⁰²

RASAKAUTUKA, anonymous.⁶⁰³

RASAKAUTUKA by Mallāri.⁶⁰⁴

RASAKAUTUKĀKHYA.⁶⁰⁵

RASAKETU.⁶⁰⁶

RASAKINNARA.⁶⁰⁷ Used as a source in the *Rasayogasāgara*.

RASALAKṢAṆAMAÑJARĪ by Kṣonimaṇilakṣmaṇa.⁶⁰⁸

RASALAKṢAṆĀNI.⁶⁰⁹

RASALAKṢAṆAŚĀSTRA.⁶¹⁰

RASĀLAMKĀRA, anonymous.⁶¹¹ An unspecified *Rasālamkāra* is quoted in the *Kūpīpakvarasanirmānavijñāna*, *Rasakāmadhenu* and Ṭoḍara's *Āyurvedasaukhyā*;⁶¹² it is one of the sources of the *Pāradasamhitā*.

RASĀLAMKĀRA by Govinda, son of Nṛhari and follower of Lakṣmīnṛsiṃha.⁶¹³

RASĀLAMKĀRA by Rāmavīrabhaṭṭa.⁶¹⁴

RASĀLAMKĀRA by Rāmeśvarabhaṭṭa.⁶¹⁵ Used as a source in the *Rasayogasāgara*.⁶¹⁶ This work is sometimes placed in the fourteenth century.⁶¹⁷

RASALEHYAVIDHĀNA.⁶¹⁸

RASAMĀLĀ.⁶¹⁹

RASAMĀNĀSA by Dayārāma, son of Devakīnandana.⁶²⁰ The *Rasamānasa* is quoted in the *Pāradasamhitā* and *Rasatattvavivecana*.

RASAMAṆGALA by Gahanānandamuni.⁶²¹

Numerous rasayogas are ascribed to Gahana,⁶²² Gahanānanda,⁶²³ Gahanānandanātha,⁶²⁴ and Gahananātha.⁶²⁵

The *Rasamaṅgala*⁶²⁶ is quoted in the commentary on the *Aṣṭamahāmātrā*,⁶²⁷ in the *Capalanirṇaya* (by Narendranāthamitra) of the *Rasataraṅgiṇī*, and in the *Rasendrakaḷpadruma*. The work is referred to in Nityanātha's *Rasaratnākara*.

Gahananātha is quoted in Mādhava Kavirāja's *Mugdhabodha*.

A *Yogaratanākara* is attributed to Gahananātha.

Gahanānandanātha was the guru of Cidghanānandanātha, the author of the *Satkaṛmasaṃgraha*.⁶²⁸

RASAMAṆI by Harihara.⁶²⁹

RASAMAÑJARĪ, anonymous.⁶³⁰

RASAMAÑJARĪ by P.T. Nārāyaṇan Mūs (1870–1907).⁶³¹

RASAMĀRAṆAVIDHI.⁶³²

RASAMĀRGA.⁶³³

RASAMĀRTAṆḌA. This work mentions the following seventeen saṃskāras of mercury: paṭṭasāraṇa, malāpakarṣaṇa, sveda, śuddhi, mardana, dhāvana, murchana, utthāpana, tiryakpātana, ūrdhvpātana, adhaḥpātana, śuci, vīryānayana, niyāmana, nirodhana, dīpana, leliḥāna, and mukhikaraṇa.⁶³⁴

The *Rasamārtanḍa* is quoted in Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, the *Kūpīpakvarasanirmānavijñāna*, the *Rasatattvavivecana*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*.

RASĀMṚTA, anonymous.⁶³⁵ An unspecified *Rasāmṛta* is quoted in the *Bheṣajasaṃhitā*, *Bhāvaprakāśa*,⁶³⁶ Gulrājśarmamiśra's commentary on the *Āyurvedaprakāśa*, the *Pāradasamhitā*, *Rasakāmadhenu*, *Rasasindhu*, and *Rasendrakaḷpadruma*.

RASĀMṚTA by Jayadevakavirāja.⁶³⁷

RASĀMṚTA by Jayanācārya.⁶³⁸

RASĀMṚTA by Kāmadeva.⁶³⁹

RASĀMṚTA by Kayyadevapaṇḍita.⁶⁴⁰

RASĀMṚTA by Rāmeśvara.⁶⁴¹

RASĀMṚTA by Vaidyakendraṇḍita.⁶⁴²

RASAMUKTĀVALĪ, a treatise on metals and their medicinal properties.⁶⁴³ A *Rasamuktāvalī* was written by Devanātha,⁶⁴⁴ the teacher of Cūḍāmaṇiśra, the author of the *Rasakāmadhenu*. The latter gives an extract from his teacher's work without mentioning its title.

Devanātha's *Rasamuktāvalī* is quoted by his son, Vāsudeva, in the latter's commentary on Subandhu's *Vāsavadattā*.⁶⁴⁵ Devanātha and Vāsudeva were Śākadvīpiya brāhmaṇas.⁶⁴⁶

An unspecified *Rasamuktāvalī* is quoted in the *Rasasindhu* and was one of the sources of the *Rasayogasāgara*.⁶⁴⁷

Devanātha's *Rasamuktāvalī* is obviously earlier than the *Rasakāmadhenu*. P.K. Gode placed it tentatively in the period between A.D. 1500 and 1672.⁶⁴⁸ The

Rasamuktāvalī quoted in the *Rasasindhu* cannot be Devanātha's work, on account of the much earlier date of Viṭṭhala, the author of the *Rasasindhu*.

RASAMŪLIKĀNIGHAṆṬU: ⁶⁴⁹ a description of particular plants used in alchemical processes.

RASANAḶṢATRAMĀLIKĀ by Mathanasipha, ⁶⁵⁰ physician to the king of Mālvā. ⁶⁵¹ Two formulae from this work are found in P. Rāy; ⁶⁵² the first formula mentions opium, the second is a svacchandabhairavarasa. ⁶⁵³ Mathanasipha's treatise is probably quoted as *Nakṣatramālā* in Ṭoḍara's *Āyurvedasaukhyā* and Viṭṭhala's *Rasasindhu*. ⁶⁵⁴ Viṭṭhala's quotation points to a date earlier than the third quarter of the fourteenth century. ⁶⁵⁵ One of the MSS was completed in A.D. 1500/1501. ⁶⁵⁶

RASĀNANDAKAUTUKA by Naravāhana. ⁶⁵⁷ Naravāhana is one of the Rasasiddhas in the *Pāradasaṃhitā*, *Rasajalanidhi*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasatarāṅgiṇī*, and *Rasendrasambhava*. ⁶⁵⁸

RASANIBANDHA. ⁶⁵⁹

RASANIDĀNA. ⁶⁶⁰

RASANIGHAṆṬU. ⁶⁶¹

RASANIRMĀNAVIDHĀNA. ⁶⁶²

RASANIRMĀNAVIDHI. ⁶⁶³

RASANIRNAYA. ⁶⁶⁴

RASĀṆKUṢA. ⁶⁶⁵

RASĀṆKUṢATANTRA by Candranātha. ⁶⁶⁶ Candra's *Rasāṅkuṣa*, a work in 10,000 verses, is mentioned in the *Gorakṣasaṃhitā*. ⁶⁶⁷ A *Rasāṅkuṣa* is quoted in the *Āyurvedasaukhyā*. ⁶⁶⁸ Several rasayogas are attributed to Candranātha.

RASAPADDHATĪ, anonymous. ⁶⁶⁹ Quoted in the *Pāradasaṃhitā*. ⁶⁷⁰

RASAPADDHATĪ by Bhairavaprasāda. ⁶⁷¹

RASAPADMACANDRIKĀ. ⁶⁷²

RASAPARAMACANDRIKĀ. ⁶⁷³

RASAPĀRIJĀTA, anonymous. ⁶⁷⁴ An unspecified *Rasapārijāta* is one of the sources of the *Āyurvedīya Khanijavijñāna*, *Pāradasaṃhitā*, and *Rasayogasāgara*. ⁶⁷⁵

RASAPĀRIJĀTA by Lakṣmīdhara Sarasvatī. ⁶⁷⁶

RASAPĀRIJĀTA by Rāmacandra. ⁶⁷⁷

RASAPĀRIJĀTA by Vaidya Śiromaṇi. ⁶⁷⁸

RASAPRABANDHA. ⁶⁷⁹

RASAPRABANDHACANDRODAYA by Bīśaladeva. ⁶⁸⁰

RASAPRABHEDANIRŪPAṆA. ⁶⁸¹

RASAPRABODHA by Nāgadeva, son of Mallideva. ⁶⁸²

RASAPRABODHACANDRODAYA by Nāganātha, son of Janārdanamiśra. ⁶⁸³

RASAPRADĪPA. ⁶⁸⁴ An unspecified *Rasapradīpa* is quoted in Jñārasarāma's version of the *Amṛtasāgara*, the commentary on the *Āyurvedābhisāra*, the *Bhāvaprakāśa* and its glosses, the *Brhadrasarājasundara*, the *Kūpīpakvarasanirmānavijñāna*, the *Nāsīrasāhī Kaikāligrantha*, ⁶⁸⁵ the *Rasakāmadhenu*, and Ṭoḍara's *Āyurvedasaukhyā*. ⁶⁸⁶ It is one of the sources of Hariśaraṇānanda's *Kūpīpakvarasanirmānavijñāna*.

RASAPRADĪPA by Nāganātha. ⁶⁸⁷

RASAPRADĪPA by Prāṇanātha. ⁶⁸⁸ This work consists of two chapters (adhyāya), with respectively 150 ⁶⁸⁹ and 469 verses. The maṅgala praises Mukunda ⁶⁹⁰ and Govinda. The introductory stanzas state that the author will summarily describe the purification and killing of the dhātus, upadhātus, rasas, uparasas, ratnas, uparatnas, viṣas and upaviṣas (1.4–5). The author distinguishes the same seven dhātus as many works on rasaśāstra do: svarṇa, raupya, tāmra, raṅga (i.e., tin), jāsada, sīsa, and lohā (1.6). His series of seven upadhātus is unusual: suvarṇamāksika, tāmramāksika, tuttha, kāmśya, rīti, sindūra, and śilājatu (1.12). Tuttha, sindūra and śilājatu can be subjected to purification (śodhana) only, not to killing (māraṇa) (1.13). The preparation of śaṅkha-dravarasa is described (2.2.29–32). The medicinal uses of inorganic compounds form the main subject of chapter two. ⁶⁹¹ The preparation of rasakarpūra, employed in the treatment of phiraṅgaroga, finds a place in this work (1.111–117; 2.2.295–298). Cobacīnī is prescribed against phiraṅgaroga (2.2.306), opium (aheḥ garalam, ahiphena) against vātavyādhī, viśucikā and apasmāra (2.1.37, 82, 121).

Sources and earlier authorities are not referred to or quoted.

Prāṇanātha's *Rasapradīpa* is one of the sources of the *Rasayogasāgara*. ⁶⁹²

The author gives no information about his genealogy. ⁶⁹³

Prāṇanātha cannot be earlier than the sixteenth century because of his references to phiraṅgaroga ⁶⁹⁴ and its treatment with cobacīnī and rasakarpūra. ⁶⁹⁵

RASAPRADĪPA by Rāmacandra of the Guha family. ⁶⁹⁶ Other works by Rāmacandra are the *Rasendracintāmaṇi* and *Cakradattanāmākagrantha*. ⁶⁹⁷

Prāṇanāthavaidya is recorded as the author of a commentary on Rāmacandra Guha's *Rasapradīpa*. ⁶⁹⁸

RASAPRADĪPA by Śaṅkarabhaṭṭa, son of Trimallabhaṭṭa. ⁶⁹⁹

RASAPRADĪPA by Vaidyārāja. ⁷⁰⁰

RASAPRADĪPA by Viśāladeva. ⁷⁰¹

RASAPRADĪPA (SAMGRAHA). ⁷⁰²

RASAPRADĪPIKĀ, anonymous. ⁷⁰³ This work consists of four chapters (adhyāya): rasaśuddhibhasmādhikāra, mahārasoparasasādhāraṇarasānām śuddhibhasmādhikāraḥ, navaratnaśuddhibhasmādhikāra, and navalohaśuddhibhasmasindūrādhikāra. ⁷⁰⁴

Maṅgalagirisūri, son of Jagannātha of Ātreya gotra, of the Gelavaṅgalavaṃśa,

wrote a commentary on the first chapter.⁷⁰⁵ He is also the author of a commentary on the *Bheṣajakalpa* attributed to Bharadvāja.⁷⁰⁶

This work is apparently identical with the *Rasapradīpikā* attributed to Bharadvāja.

RASAPRADĪPIKĀ by Bharadvāja.⁷⁰⁷ This work consists of four chapters (adhyāya), devoted to: (1) mercury and its processing; (2) the mahārasas (vaikrānta, māṅṣika, śilādhātu = śilājatu, sasyaka, capala, rasaka), uparasas (gandhaka, gairika, kāśīsa, saurāṣṭra, haritāla, manahṣilā, añjana, kaṅkuṣṭha), sādharāṇarasas (kampilla, gaurīpāṣāṇa, navasāra, varāṭaka, bodāśāṅgī, hiṅgula), the purification of opium (ahipheṇa), vatsanābha, nepāla, and mahiṣākṣa; (3) the nine gems (māṇikyā, mauktika, pravāla, marakata, puṣparāga, vajra, nīla, vaiḍūrya, gomedaka); (4) the nine metals.⁷⁰⁸

The main source of the *Rasapradīpikā* was the *Rasaratnasamuccaya*, though the arrangement of the subjects differs.

Part of a commentary, namely the commentary on the first chapter, by Maṅgalagiri Sūri, son of Jagannātha, of the Gelavaṅgalavaṁśa, has been preserved.⁷⁰⁹

A Telugu version of the *Rasapradīpikā* was made by Muḍumba Venkaṭācārya, who does not refer to Bharadvāja as its author, but presents the work as an instruction of Ātreya by Agastya, in accordance with revelations by the Aśvins to Dhanvantari.⁷¹⁰

The *Rasapradīpikā* is later than the sixteenth century, on account of the date of the *Rasaratnasamuccaya*, its chief source, and earlier than the eighteenth century, the period in which Muḍumba lived.⁷¹¹

RASAPRADĪPIKĀ by Maṅgalagirisūri.⁷¹²

RASAPRAKĀŚA, anonymous.⁷¹³ A *Rasapraśā* is one of the sources of the *Pāradasaṃhitā*.

RASAPRAKĀŚA by Kṛṣṇaśarman.⁷¹⁴

RASAPRAKĀŚA by Mūlarāja.⁷¹⁵

RASAPRAYOGA.⁷¹⁶

RASAPRAYOGA by Somaprabhācārya.⁷¹⁷

RASARAHASYA by Dayārāma, son of Devakīnandana.⁷¹⁸ This work is quoted in Mādhava's *Sarvadarśanasamgraha*,⁷¹⁹ the *Rasakāmadhenu*, the *Rasasindhu*, and Ṭoḍara's *Āyurvedasaukhya*. It is one of the sources of the *Pāradasaṃhitā*.

The reference to the *Rasarahasya* in the *Rasasindhu* establishes that Dayārāma lived before the third quarter of the fourteenth century.

RASARĀJA, anonymous.⁷²⁰ Quoted in the *Bṛhadrasarājasundara*.

RASARĀJA by Lakṣmīśvara.⁷²¹

RASARĀJA by Matīrāma.⁷²²

RASARĀJA by Śaṃkara.⁷²³ Śaṃkara is one of the Rasasiddhas in the *Rasatarāṅgiṇī* and *Rasendrasambhava*. Several rasayogas are ascribed to him. He is also credited with a

Rasaratnasamuccaya and *Rasaśaṃkara*.

RASARĀJAHAMSA, anonymous.⁷²⁴ Quoted in the *Pāradasaṃhitā*, *Rasakāmadhenu* and Ṭoḍara's *Āyurvedasaukhya*. The *Rājahamśa*, quoted by Ṭoḍara, may be the same work.

RASARĀJAKALPA.⁷²⁵

RASARĀJAKALPALAKṢMĪ by Viṣṇu Paṇḍita, son of Mahādeva.⁷²⁶ This work is undoubtedly identical with Viṣṇudeva's *Rasarājalakṣmī*.

RASARĀJALAKṢMĪ, anonymous.⁷²⁷ A work of this title is one of the sources of the *Pāradasaṃhitā*; it is quoted in the *Rasakāmadhenu*⁷²⁸ and Ṭoḍara's *Āyurvedasaukhya*.⁷²⁹

RASARĀJALAKṢMĪ by Rāmeśvarabhaṭṭa.⁷³⁰ This work describes the purification and the properties of mercury.⁷³¹

Rāmeśvarabhaṭṭa was the son of Viṣṇudeva, who wrote the *Rasarājalakṣmī*; he can therefore be placed in the latter half of the fourteenth century. He is regarded as the author of a commentary on his father's work.⁷³²

RASARĀJALAKṢMĪ by Revaṇasiddha.⁷³³

RASARĀJALAKṢMĪ by Sarvajñabhaṭṭa.⁷³⁴

RASARĀJAMAHODADHI by Kapālin.⁷³⁵ A *Rasarājamahodadhi* was one of the sources of the *Rasavidyāmahārṇava*.

RASARĀJAMRGĀṆKA by Bhojarāja.⁷³⁶

RASARĀJAPRAKARAṆA by Mādhava Upādhyāya.⁷³⁷

RASARĀJASAMKARA, anonymous.⁷³⁸ A *Rasarājasaṃkara* is quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Kūṭīpakvarasanirmāṇavijñāna*, and the *Pāradasaṃhitā*.

RASARĀJASAMKARA by Rāmakṛṣṇa, son of Mudgala,⁷³⁹ great-grandson of Kamalākara, pupil of Devendravana.⁷⁴⁰ This treatise in nine chapters (aṅgāḥ)⁷⁴¹ deals with alchemical procedures and the treatment of diseases.⁷⁴² It is one of the sources of the *Rasayogasāgara*.⁷⁴³ The work is sometimes assigned to the fifteenth century.⁷⁴⁴

RASARĀJASAMSKĀRĀḤ.⁷⁴⁵

RASARĀJASEKHARĀ by Gaṅgādhara.⁷⁴⁶

RASARĀJASĪROMAṆI by Paraśurāma.⁷⁴⁷ Mentioned as one of the sources of the *Rasayogasāgara*.⁷⁴⁸ An unspecified *Rasarājasiromaṇi* is quoted in the *Kūṭīpakvarasanirmāṇavijñāna*.

RASARĀJAŚIROMAṆI by Revāṇa Siddha.⁷⁴⁹
 RASARĀJASUDHĀNIDHI by Vrajarāja Śukla.⁷⁵⁰
 RASARĀJANA.⁷⁵¹
 RASARASĀRṆAVA.⁷⁵²
 RASARATNA by Śrīnātha.⁷⁵³

RASARATNADĪPIKĀ, unspecified. Quoted in the *Rasakāmadhenu*, *Pāradasaṃhitā*, and Somadevaśarman's commentary on the *Āyurvedaprakāśa*. A *Ratnadīpikā* is cited in Ṭoḍara's *Āyurvedasaukhyā*.

RASARATNADĪPIKĀ by Mallarāja.⁷⁵⁴
 RASARATNĀKARA, anonymous.⁷⁵⁵

RASARATNĀKARA by Ādinātha.⁷⁵⁶ Ādinātha is one of the Mahāsiddhas in the *Haṭha-yogapradīpikā* (1.5).⁷⁵⁷ He is also mentioned as the first of the nine Nāthas⁷⁵⁸ and the first of twelve sages to whom the Kāpālika doctrine was revealed.⁷⁵⁹

RASARATNĀKARA by Cakrapāṇi.⁷⁶⁰
 RASARATNĀKARA by Devacandra.⁷⁶¹
 RASARATNĀKARA by Devācārya.⁷⁶²

RASARATNĀKARA by Nāgārjuna.⁷⁶³ Actually, this work does not exist; the work recorded in this way is Nāgārjuna's *Rasendramaṅgala*.⁷⁶⁴

RASARATNĀKARA by Nāthasiṃha.⁷⁶⁵ This work is probably identical with Nityanātha's *Rasaratnākara*.

RASARATNĀKARA by Pūjyapāda.⁷⁶⁶
 RASARATNĀKARA by Rāmacandra.⁷⁶⁷
 RASARATNĀKARA by Revāṇasiddha.⁷⁶⁸

RASARATNĀKARA by Saidapahāra, a treatise written in Hindī.⁷⁶⁹ The author was a son of Saida Hamajā, probably a Muslim and a ḥakīm.⁷⁷⁰

RASARATNĀKARA by Śukrapāṇi.⁷⁷¹
 RASARATNĀKARA by Suśruta.⁷⁷²

RASARATNAKAUMUDĪ, anonymous.⁷⁷³ A text of this title was one of the sources of the *Rasayogasāgara*.⁷⁷⁴ Syphilis (phiraṅga) is mentioned in this work.⁷⁷⁵

RASARATNAMĀLĀ, anonymous.⁷⁷⁶ An unspecified alchemical *Ratnamālā* is quoted in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.

RASARATNAMĀLĀ by Hari Vaidya of Gurjaradeśa, father of the Devadatta who, in

about the latter part of the fourteenth century, composed a small work called *Ratnamālā*.⁷⁷⁷

RASARATNAMĀLĀ by Narasiṃha Kavirāja, the guru of Vaidyacentāmaṇi.⁷⁷⁸
 RASARATNAMĀLĀ by Siddha Nityanātha.⁷⁷⁹

RASARATNAMĀNIMĀLĀ by Bābābhāi Vaidya.⁷⁸⁰ Used as a source in the *Rasayogasāgara*.⁷⁸¹ Quoted in the *Kūpīpakvarasanirmānavijñāna*. The work is sometimes assigned to the nineteenth century.⁷⁸²

RASARATNAPRADĪPA, anonymous.⁷⁸³ An unspecified *Rasaratnapradīpa* is one of the sources of the *Pāradasaṃhitā*.

RASARATNAPRADĪPA by Jaṅg Bahādur.⁷⁸⁴
 RASARATNAPRADĪPA by Kāmeśvara.⁷⁸⁵
 RASARATNAPRADĪPA by Rājarāv.⁷⁸⁶

RASARATNAPRADĪPA by Rāmarāja.⁷⁸⁷ This treatise consists of five chapters (adhikāra), dealing with (1) the processing of mercury and the purification and killing of the dhātus, etc., (2–5) rasas and their uses in medicine. The work ends with nāḍīparīkṣā. The arrangement of the diseases agrees with the *Mādhavanidāna*.

The preparation of mineral acids is described in this work.⁷⁸⁸

Sources mentioned by Rāmarāja (1.10) are: Bhagavadgovinda (probably the author of the *Rasaḥṛdaya*), *Bhāvānimata*, Dāmodara, *Īśaḥṛdaya*,⁷⁸⁹ *Jalasudhāmbhodhi*,⁷⁹⁰ *Kākaçaṇḍeśvarīmatatantra*,⁷⁹¹ Nāgārjuna, *Saṃsṛtisūtra*,⁷⁹² *Sūtamahodadhi*, *Svacchandaśaktyāgama*, Vāsudeva, and Vyāḍi.⁷⁹³

The *Rasaratnapradīpa* is quoted in Bhāvamīśra's *Bhāvaprakāśa*, the *Rasakāmadhenu*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, Ṭoḍara's *Āyurvedasaukhyā*, Trimalla's *Yogatarāṅgiṇī* and *Bṛhadyogatarāṅgiṇī*, Vāgbhaṭa's *Rasaratnasamuccaya*, and the *Yogarātnākara*. It is cited as *Rasaratnadīpikā* in the *Rasayogasāgara*, as *Rasaratnapradīpikā* in the *Rasakāmadhenu*, Somadevaśarman's commentary on the *Āyurvedaprakāśa*, and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

The *Rasaratnapradīpikā* is also one of the sources of the *Kūpīpakvarasanirmānavijñāna* and *Rasendrasambhava*. The *Ratnapradīpa*, quoted in Trimalla's *Bṛhadyogatarāṅgiṇī*, the *Vaidyakasāroddhāra*, and the *Yogarātnākara*, and the *Rasaratnadīpa* of the *Amṛtasāgara* may be identical with Rāmarāja's *Rasaratnapradīpa*. The *Ratnadīpikā* ascribed to Rāmarāja⁷⁹⁴ is probably the same work as the *Rasaratnapradīpa*.

Rāmarāja is also credited with a *Rasadīpikā*⁷⁹⁵ and *Nāḍīprakāśa*⁷⁹⁶ or *Nāḍīparīkṣā*.⁷⁹⁷

Information on the author and his genealogy is found in the introductory verses (1.4–9). Rāmarāja descends from a king called Hariścandra, who reigned at Kāṣṭhā on the banks of the Yamunā. Hariścandra's son was Sādhāraṇa. This Sādhāraṇa had three sons: Lakṣmaṇasiṃha, Sahajapāla, and Madana.⁷⁹⁸ Rāmarāja was the son of king Ratnapāla,⁷⁹⁹ a descendant of Madana.

The *Rasaratnapradīpa* was written at the request of someone called Sādharaṇa, who may have been an elder brother of Rāmarāja.⁸⁰⁰

Dates assigned to Rāmarāja are:⁸⁰¹ between A.D. 1200 and 1500,⁸⁰² approximately A.D. 1350,⁸⁰³ the fifteenth century,⁸⁰⁴ A.D. 1420,⁸⁰⁵ the fifteenth or sixteenth century,⁸⁰⁶ and the seventeenth century.⁸⁰⁷

Rāmarāja should probably be placed in the period A.D. 1400–1550, since he is later than his ancestor Madanapāla and earlier than Bhāvamīśra, who quotes his *Rasaratnapradīpa*.

RASARATNAPRADĪPIKĀ, anonymous.⁸⁰⁸

RASARATNASAMUCCAYA, anonymous.⁸⁰⁹

RASARATNASAMUCCAYA by Bhaṭṭācārya, son of Nṛpaśiṃha Gupta.⁸¹⁰

RASARATNASAMUCCAYA by Lokanātha.⁸¹¹

RASARATNASAMUCCAYA by Māṇikyadevasūri.⁸¹²

The author calls his work *Rasāmṛtaśrī* in the introductory verses (1.4) and *Rasaratnasamuccaya* at the end; the colophons refer to it as *Rasāmṛtaśrī*. The treatise deals with alchemical operations and the uses of alchemical preparations for medicinal purposes. It is written in Sanskrit verse of various metres,⁸¹³ and is accompanied by explanations in prose. The treatise consists of 146 stanzas, arranged in three chapters (adhikāra).

The subjects of chapter one (rasāṅgasamgrahī; 50 verses) are: maṅgala and introduction (1–4); the mahārasas: vaikrānta, amala (= abhraka), sasyaka, adri (= śilājatu), māṅṣika, and ahi⁸¹⁴ (5);⁸¹⁵ the uparasas: kaṅkuṣṭha, gandha (sulphur), añjana, gairika, mṛd (= saurāṣṭrī), (manah)śilā, and ālaka (= haritālā) (5);⁸¹⁶ the dhātus: tāmrā (copper), tāra (silver), pittala (brass), nāga (lead), hemaṇ (gold), vaṅga (tin), tīkṣṇa (iron), kāmasyaka (bronze), and vaṭṭaloḥa (an alloy) (6);⁸¹⁷ the poisonous substances (7); the eight kinds of bile (pitta; 8); the kinds of animal fat (vasā; 8); the pīta-, aruṇa- (= rakta-), sita- (= śveta-), and asitavargas (9); the eight oils of vegetable origin and some ghees (10); the three naisargikadoṣas of mercury: mala, śikhin, viṣa (12); some saṃskāras and related operations (14–26); the purification of mahārasas and alparasas (= uparasas) (27–31); the killing of the metals (32–39); the killing of the black variety of mica (kṛṣṇābhraka; 40–46); the killing of diamonds and other gems (47–48).

Chapter two (rasarahasya; 40 verses) extols the medicinal qualities of alchemically prepared drugs (1–11); a number of rasayogas are described: saṃnipātaripurasa (12–14), vajrahemarasas (17–21), bhūtabhairavarasa (26), bhṛhadvaḍavanalarasa (27), a guṭikā (28), vāḍavīguṭikā (29), cintāmaṇirasa (30–34), kanakavajrarasa (35–37), and chandabhairavarasa (38–39); some yantras (15–16: kacchapā- and bhūdharayantra) and the cakramūṣā (22–25) are discussed too.

Chapter three (56 verses) is concerned with the following rasayogas: tāmrabhairavarasa (4–9), sudhāsūta (10–12), jvarārirasa (13), some other rasas (16–32), hiraṇyagarbharasa (33–39), nāgendrarasa (40–41), viśveśvararasa (42), agnikumārarasa (43–49), and mahābhairavarasa (50–56).

The passages in prose give synonyms of the substances and plants mentioned (ad

1.34, 35, 36–37, 39, 41, 43; 2.30) or details concerning the preparation of particular rasayogas (ad 2.17–21, 28, 29, 30–32; 3.4–5, 18, 19, 24–25, 26, 30, 54–55, 56).

Authorities referred to are Govinda and Vyāḍi (2.6).

Sources mentioned are the *Rasārṇava* and *Rasāvaloka* (2.6). *Rasarahasyodadhi* and *Rasopaniṣad*, mentioned at the end of chapter two (2.40) may also be titles of works consulted by the author.

A cakramūṣā, not known from other treatises, is described (2.22–25) and referred to (2.20; prose ad 2.17–21). A maṅḍākyayantra, otherwise unknown, is mentioned (2.13). The author was acquainted with the agniśomābhidhayantra (3.50).⁸¹⁸

The author mentions his name as Māṇikyadeva in the introductory verses (1.4), at the end of chapter one (1.50), and at the end of the work; he refers to himself as Māṇikyendu at the end of chapter two (2.40).

The name of his teacher, Devacandra, appears at the end of chapters one and three. Another instructor may have been Pārśvadevasūri (1.4).

Māṇikyadeva was a Jain, as is evident from the maṅgala verses, addressed to the Tirthaṅkaras Ṛṣabha and Neminātha (= Ariṣṭanemi), a verse about ahimsā (1.11), and the colophons.

J.C. Sikdar⁸¹⁹ asserts that the author belonged to the Vāṭagaccha of Śvetāmbara Jains and was the pupil of Devasūri or Devacandrasūri, the second ācārya of the Vāṭagaccha.

J.C. Sikdar is of the opinion that Māṇikyadeva lived from A.D. 1268 to 1327.⁸²⁰ The same author assigned Māṇikyadeva to the sixteenth century in an earlier article.⁸²¹ He regards him as identical with the Māṇikyacandra who composed the mahākāvya *Nalāyana* or *Kuberapurāṇa*.⁸²²

RASARATNASAMUCCAYA by Nityānanda(?).⁸²³

RASARATNASAMUCCAYA by Nityanāthasiddha.⁸²⁴ The attribution of this work to Nityanātha may be based on a confusion with the *Rasaratnākara*.⁸²⁵

RASARATNASAMUCCAYA by Śaṃkara.⁸²⁶ Śaṃkara is also credited with a *Rasarāja*.

RASARATNASAMUCCAYA by Siddharātri(?).⁸²⁷

RASARATNASAMUCCAYA by Somadeva.⁸²⁸

RASARATNASĀRA by Vyāsalaṅkṣmīdhara, son of Someśvara.⁸²⁹

RASARATNASĀRASAMGRAHA.⁸³⁰

RASARATNĀVALĪ, unspecified.⁸³¹

RASARATNĀVALĪ by Bhāḡiratha.⁸³²

RASARATNĀVALĪ by Candrarājākavi.⁸³³

RASARATNĀVALĪ by Gurudattasiddha.⁸³⁴

RASĀRṆAVA by Nāgārjuna.⁸³⁵ Mentioned as one of the sources of the *Rasayogasāgara*.

RASĀRṆAVA by Siddharājayogin.⁸³⁶

RASĀRṆAVAKALĀ.⁸³⁷

RASASĀGARA.⁸³⁸ This is an exhaustive treatise in several chapters (khaṇḍa). The two chapters that have been preserved deal with metallic and mineral preparations (rasakhaṇḍa) and vegetable decoctions (kvāthakhaṇḍa).⁸³⁹

A *Rasasāgara* is quoted in Dattarāma's *Bṛhadrasarājasundara*,⁸⁴⁰ Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*, the *Kūpīpakvarasanirmānavijñāna*, Niścalkara's *Ratnaprabhā*, the *Bhāratabhāṣajyāratnākara*,⁸⁴¹ *Rasarājalakṣmī*, *Rasayogasāgara*,⁸⁴² and Ṭoḍara's *Āyurvedasaukhyā*.⁸⁴³ A *Rasasāgara* in Hindī was one of the sources of the *Pāradasaṃhitā*.

RASASĀGARA by Kṣemāditya, son of Ghanāditya.⁸⁴⁴ Used as a source in the *Rasayogasāgara*.

RASASAMGRAHA.⁸⁴⁵ A *Rasasamgraha* is referred to in the *Amṛtasāgara*.

RASASAMGRAHASIDDHĀNTA, anonymous.⁸⁴⁶

RASASAMGRAHASIDDHĀNTA by Acyuta, son of Dharāṇi Goṇiga, son of Mahādeva, son of Soma, son of Hari, of the family of minister Nādiga, a Nāgara.⁸⁴⁷ Acyuta is sometimes regarded as the teacher of Somadeva, the author of the *Rasendracūḍāmaṇi*.⁸⁴⁸

RASASAMGRAHASIDDHĀNTA by Govindarāma Ṭhākura,⁸⁴⁹ son of Veṇīdatta and a resident of Nāḍīyāda and Kāśī.⁸⁵⁰ This elaborate treatise in eleven chapters was composed in A.D. 1793/94.⁸⁵¹ It is based on *Rasacintāmaṇi*, *Rasahr̥daya*, *Rasalakṣmīvilāsa*, *Rasamañjarī*, *Rasārṇava*, etc.⁸⁵² The *Rasayogasāgara* mentions this work as one of its sources.⁸⁵³ It is quoted in the *Kūpīpakvarasanirmānavijñāna*.

RASASAMJĪVANEŚVARA by Harihara.⁸⁵⁴ A *Rasasamjīvana* is mentioned among the sources of the *Ratnākaraṣaḍhayogagrantha*.

RASAŚAMKARA by Śaṃkara.⁸⁵⁵ The *Rasaśamkara* was one of the sources of Dattarāma's *Bṛhadrasarājasundara*.⁸⁵⁶ A Śaṃkara is also credited with the *Rasarāja* and a *Rasaratnasamuccaya*.

RASASAMSKĀRA.⁸⁵⁷

RASASĀRA by Kṣemāditya.⁸⁵⁸

RASASĀRĀMṚTA by Rāmasena. This work is about pharmaceutical preparations of mercury and other metallic substances; it ends with a chapter on aphrodisiacs (vṛṣyādhikāra).

Sources are the treatises of Gahanānandanātha, Nityanātha and Śālinātha.⁸⁵⁹

An author called Rāmasena is quoted in Āsubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.

RASASĀRASAMGRAHA, anonymous.⁸⁶⁰ A *Rasasārasamgraha* is one of the sources of the *Rasayogasāgara*⁸⁶¹ and may be quoted in the *Yogarātnākara*.

RASASĀRASAMGRAHA by Gaṅgādhara paṇḍita.⁸⁶² This short treatise describes mercurial preparations and their medicinal uses.⁸⁶³

RASASĀRASAMGRAHA by Kālidāsa.⁸⁶⁴

RASASĀRASAMUCCAYA.⁸⁶⁵ This work is similar to the *Rasaratnasamuccaya*; it is followed by explanatory notes in Telugu.⁸⁶⁶

RASASĀRATILAKA by Rasendratilaka Yogin.⁸⁶⁷ Rasendratilaka is a Rasasiddha in the *Pāradasaṃhitā* and *Rasaratnasamuccaya*.

RASASĀRODDHĀRAPADDHATI.⁸⁶⁸ Quoted in the *Kūpīpakvarasanirmānavijñāna* and *Pāradasaṃhitā*.

RASASARVEŚVARA.⁸⁶⁹ By Vāsudeva.⁸⁷⁰ Vāsudeva is one of the Rasasiddhas in the *Pāradasaṃhitā* and *Rasaratnasamuccaya*.⁸⁷¹

RASASARVEŚVARADARŚANA.⁸⁷²

RASAŚĀSTRA.⁸⁷³

RASAŚĀSTRASĀRASAMGRAHA, anonymous.⁸⁷⁴

RASAŚĀSTRASĀRASAMGRAHA by Dattātreya vaidya.⁸⁷⁵

RASASIDDHĀNTA.⁸⁷⁶ A *Rasasiddhānta* is quoted in Ṭoḍara's *Āyurvedasaukhyā*.⁸⁷⁷

RASASIDDHĀNTASĀGARA.⁸⁷⁸

RASASIDDHĀNTASAMGRAHA.⁸⁷⁹

RASASIDDHĀNTAŚĀSANA.⁸⁸⁰

RASASIDDHI.⁸⁸¹

RASASIDDHIPRAKĀŚA, anonymous.⁸⁸²

RASASIDDHIPRAKĀŚA by Mādhavabhaṭṭa.⁸⁸³ The author may have been a relative of Mādhava Upādhyāya, who wrote the *Āyurvedaprakāśa*, for both were born in Saurāṣṭradeśa from a Sārasvata family. The first chapter of the work describes mercury, its origin, purification, etc.; the second chapter is about the uparasas.⁸⁸⁴ The *Rasasiddhiprakāśa* quotes the *Rasapaddhati* and is therefore probably later than the first half of the seventeenth century.⁸⁸⁵

RASASIDDHIPRAKĀŚA by Viṣṇugirijī of Kacha.⁸⁸⁶

RASASIDDHIŚĀSTRA. This treatise, ascribed to Vyāḍipāda (Bha-li-pa), and lost in the original Sanskrit, was translated into Tibetan under the title of *Dñul-chu grub-paḥi*

bstan-bcos. The Tibetan version, mentioned in the catalogue of the Tanjur, has not been preserved. The translators were Narendrabhadra of India and the Tibetan Rin-chen dpal (Ratnaśrī) of Oḍḍiyāna.⁸⁸⁷

The treatise called *Rasāyanaśāstrodhṛti* may have formed part of the *Rasasiddhiśāstra*.⁸⁸⁸

RASASINDHU, anonymous.⁸⁸⁹ A *Rasasindhu* is one of the sources of the *Pāradasaṃhitā*; it is quoted in the *Bṛhadrasarājasundara* and Somadevaśarman's commentary on the *Āyurvedaprakāśa*.

RASASINDHU by Viṣṇu.⁸⁹⁰

RASASINDHU by Viṭṭhala,⁸⁹¹ son of Mahādevagalagaṇḍa.⁸⁹² Chapter one is called *rasaśodhanajāraṇādhikāra*, chapter three *rasagrahaṇajalāyogādhikāra*; the title of another chapter is *dūtādīlakṣaṇādhikāra*.⁸⁹³

The introductory verses indicate that this work also deals with therapy.⁸⁹⁴

Authorities and works quoted are:⁸⁹⁵ *Bhavanīmata*, *Kākacaṇḍeśvaramata*, *Nīlakaṇṭha*, *Rasacandrikā*, *Rasadarpaṇa*, *Rasādīpikā*, *Rasāmṛta*, *Rasamuktāvalī*, *Rasarahasya*, *Rasarājalakṣmī*, *Rasaratnākara*,⁸⁹⁶ *Rasaratnāvalī*, *Rasārṇava*, *Rasendramaṅgala*, *Śrīmadauma*,⁸⁹⁷ *Sūtamahodadhi*, *Svacchandaśaktyāgama*, and *Svasaṃvedya*.⁸⁹⁸ To this series should be added:⁸⁹⁹ *Ānandānubhava*, *Dāmodara*, *Kāmadevabhavanīmata*,⁹⁰⁰ *Kāmarājarasādīpikā*,⁹⁰¹ *Kulāgama*,⁹⁰² *Lokanātha*, *Nakṣatramālā*, *Rasamahodadhi*, *Rasapaṭala*, *Rasārṇava* of Pareśa, *Rasendracūḍāmaṇi*, *Ratnāvalī*, *Siddhanāgārjuna*, *Śrīmata*, *Sūtārṇava*, *Vaidyanātha*, *Vāsudevānubhava*, *Vyāḍi*, and *Yāmalatrāya* of Keśava.⁹⁰³

The *Rasasindhu* is quoted in the *Rasendrapurāṇa*, Ṭoḍara's *Āyurvedasaṃkhyā*, Tri-malla's *Yogatarāṅgiṇī* and *Bṛhadyogatarāṅgiṇī*, and the *Yogarātṇākara*.

The quotations from the *Rasarājalakṣmī*, another work of Viṭṭhala, also called Viṣṇudeva, prove that the *Rasasindhu* was written after the completion of the former work.

RASASINDŪRA.⁹⁰⁴

RASASINDŪRĀDINIRMĀṆAVIDHI.⁹⁰⁵

RASASINDŪRAYOGAKRAMĀNUPĀNAVICĀRA.⁹⁰⁶

RASAŚODHANA.⁹⁰⁷

RASAŚODHANAVIDHI by Nityanātha.⁹⁰⁸

RASAŚUDDHI.⁹⁰⁹

RASAŚUDDHIVIDHĀNA.⁹¹⁰

RASASUDHĀKARA.⁹¹¹

RASASUDHĀMBHODHI.⁹¹² This work was one of the sources of Viṣṇudeva's *Rasarājalakṣmī*.

RASASUDHĀNIDHI by Vrajārāja Śukla.⁹¹³

RASASŪTRĀRBHIDHĀNA:⁹¹⁴ an anonymous text on the origin of mercury from the semen of Śiva.⁹¹⁵ *Rasasūtrārbhidhāna* is the title of one of the chapters of Maṅgalagiri's *Sūtrasthāna*.⁹¹⁶

RASASŪTRASTHĀNA.⁹¹⁷

RASASVACCHANDA.⁹¹⁸ *Svacchanda*(bhairava) is often referred to and quoted in works on rasaśāstra.⁹¹⁹ Several Tantric works are called after *Svacchanda*(bhairava).⁹²⁰

RASATANTRA by Guha.⁹²¹ This work, said to consist of 6,000 verses, is mentioned in the *Gorakṣasaṃhitā*.⁹²²

RASATANTRA by Virābhadrā.⁹²³ This work, in 1,000 verses, is referred to in the *Gorakṣasaṃhitā*.⁹²⁴

RASATANTRASAMGRAHA.⁹²⁵

RASATANTRASĀRA. This work, otherwise unknown, is one of the sources of the *Rasendrasambhava*.

RASATANTRĀVALĪ by Gurudatta Siddha.⁹²⁶

RASATARAṅGAMĀLIKĀ by Janārdanabhaṭṭa.⁹²⁷

RASATARAṅGIṆĪ by Bhānudatta Miśra.⁹²⁸

RASATATTVASĀRA.⁹²⁹

RASATATTVAVIVECANA by Ambikādatta Śāstrī.⁹³⁰ This useful and systematic work, written in Hindī, with a profusion of quotations from Sanskrit texts, mentions the following sources: *Ānandakanda*, *Āyurvedaprakāśa*, *Bhāvaprakāśa*, *Bṛhadyogatarāṅgiṇī*, *Dhanvantarisamhitā*, *Kāmaratna*, *Nighaṇṭuratnākara*, *Pāradasaṃhitā*, *Rasacintāmaṇi*, *Rasadarpaṇa*, *Rasahrdaya* and its commentary, *Rasakāmadhenu*, *Rasamānasa*, *Rasamārtanḍa*, *Rasapaddhati*, *Rasaprakāśasudhākara*, *Rasarājapaddhati*, *Rasarājasundara*, (Nityanātha's) *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasārṇava*, *Rasasāra*, *Rasatarāṅgiṇī*, *Rasendracintāmaṇi*, *Rasendracūḍāmaṇi*, *Rasendramaṅgala*, *Rasendrasārasaṃgraha*, *Rasopaniṣad*, *Rudrayāmala*, *Śaktyavatāra*, *Śārngadharaśamhitā*, *Ṭoḍarānanda*, *Vaidyakalpadruma*, *Yogarātṇākara*, and *Yogatarāṅgiṇī*.

RASAUŚADHACIKITSĀ.⁹³¹

RASAUŚADHALEHYAVIDHĀNA.⁹³²

RASAUŚADHAVIDHĀNA.⁹³³

RASAUŚADHIVARGAPRAKARAṆA.⁹³⁴

RASAVĀDA.⁹³⁵

RASAVĀGBHAṬA.⁹³⁶ This work is one of the sources of the *Pāradasaṃhitā*; it is quoted in the *Rasakāmadhenu*.

RASAVAIŚEŚIKA.⁹³⁷
 RASAVAIŚEŚIKA.⁹³⁸
 RASAVAIŚEŚIKA, anonymous.⁹³⁹
 RASAVAIŚEŚIKA by Vellālagopāla.⁹⁴⁰
 RASAVALLARĪ.⁹⁴¹

RASĀVALOKA by Śukrācārya.⁹⁴² This work, in 6,000 verses, is mentioned in the *Goraśasamhitā*⁹⁴³ and Māṇikyadeva's *Rasaratnasamuccaya*. Śukra or Śukrācārya is a Rasasiddha in the *Rasajalanidhi*.⁹⁴⁴ A particular method of killing iron (lohamāraṇa), resulting in a product called śukralauha, was taught by Śukra to his disciple Ādima.⁹⁴⁵

RASĀVĀRIDHI by Māṇḍavya.⁹⁴⁶
 RASAVARṆA.⁹⁴⁷
 RASAVARṆANA.⁹⁴⁸

RASĀVATĀRA.⁹⁴⁹ Quoted in one of the parīṣiṣṭas of the *Ānandakanda*,⁹⁵⁰ Caturbhuja's commentary on the *Rasahṛdaya*, Khare's commentary on the *Rasaratnasamuccaya*, the *Kūpīpakvarasanirmānavijñāna*, and Tōḍara's *Āyurvedasaukhyā*. Mentioned as one of the sources of the *Pāradasamhitā* and *Rasayogasāgara*.⁹⁵¹

RASĀVATĀRA by Māṇikyacandra Jaina.⁹⁵² Recorded among the sources of the *Rasayogasāgara*.⁹⁵³ Quoted in the *Kūpīpakvarasanirmānavijñāna*. The work is placed in the fourteenth or fifteenth century.⁹⁵⁴

RASAVIDHĀNA.⁹⁵⁵
 RASAVIDYĀ.⁹⁵⁶
 RASAVIDYĀDĪKṢĀVIDHĀNA.⁹⁵⁷

RASAVIDYĀMAHĀRṆAVA, compiled by Raghunātha Śāstrin.⁹⁵⁸ Sources of this work are: *Pāradasamhitā*, *Rasajalanidhi*, *Rasapaddhati*, *Rasaprakāśasudhākara*, *Rasārājama-hodadhi*, *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasāyanatarāṅgiṇī*, *Rasendracintāma-ṇi*, and *Rasendrasārasaṃgraha*.

RASAVIDYĀRATNA by Śivānanda Yogin.⁹⁵⁹
 RASAVIDYĀSĀRODDHĀRA.⁹⁶⁰
 RASAVINODA.⁹⁶¹
 RASAVIŚVADARPAṆA by Harihara.⁹⁶²
 RASAVIVEKA.⁹⁶³
 RASAYĀMALA.⁹⁶⁴ A *Rasayamala* is quoted in Vaidyacināmaṇi's *Prayogāmṛta*.
 RASĀYANA.⁹⁶⁵
 RASĀYANAKALPADRUMA by Rāmakṛṣṇa Bhaṭṭa.⁹⁶⁶
 RASĀYANAKĀVYA by Nāthurāma.⁹⁶⁷
 RASĀYANANIDHĀNA.⁹⁶⁸
 RASĀYANANIRMĀNAVIDHI.⁹⁶⁹

RASĀYANANIRŪPAṆA.⁹⁷⁰
 RASĀYANĀNUPĀNA.⁹⁷¹
 RASĀYANAPARĪKṢĀ.⁹⁷² Recorded among the sources of the *Rasayogasāgara*.
 RASĀYANAPRAKARANA by Merutuṅga.⁹⁷³
 RASĀYANAPRAKĀŚA.⁹⁷⁴
 RASĀYANAPRAKRIYĀSAMGRAHA.⁹⁷⁵
 RASĀYANARASEŚVARĀRĀDHANAVIDHI.⁹⁷⁶

RASĀYANASAMGRAHA.⁹⁷⁷ Sources quoted are: *Cikitsāsāgara*, *Laghuyogatarāṅgiṇī*, *Motiyogatarāṅgiṇī*, *Rasakaumudī*, *Rasamañjarī*, *Rasaratnadīpa*, *Rasaratnākara*, *Rasa-saṃketakalikā*, *Rasasāra*, *Rasāyanādhyāya*, *Rasendracintāmaṇi*, *Śāringadhara*, *Vaidya-manotsava*, *Vaidyarahasya*, and *Vaidyavilāsa*.⁹⁷⁸

The *Rasāyanasamgraha* is quoted in the *Āyurvedīya Khanijavijñāna*.

RASĀYANASAMGRAHA, compiled by Kṛṣṇaśāstrī Bhāṭavadekar.⁹⁷⁹ Mentioned as one of the sources of the *Rasayogasāgara*.⁹⁸⁰ Quoted in the *Kūpīpakvarasanirmānavijñāna*.

RASĀYANASAMHITĀ by Svāmin Prabodhānanda.⁹⁸¹
 RASĀYANAŚĀSTRA.⁹⁸²

RASĀYANAŚĀSTRODDHṚTI: a treatise lost in its Sanskrit original, rendered into Tibetan under the title of *Gser-hgyur-gyi bstan-bcos (bsdus-pa)*, or, in Sanskrit, *Dhātuvā-dasāstra(samgraha)*.⁹⁸³

The subjects dealt with in the treatise, consisting of forty-four verses, are: the qualities (yon-tan) of mercury (diul-chu) and mica (lhañ-cher) (4–5); the preparation of a copper polish (6–7); the amalgamation of mercury with silver and gold (8); the bandha of mercury (9); the preparation of gold-coloured polishes by means of the three rarest substances or their substitutes (10–12); aurifaction (13–16); varieties of copper (17); gold- or silver-coloured polishes on copper and lead (18–19); other polishes (20–21); the qualities of gold (22–23); a polish (24); the preparation of powdered gold (25–26); the purification of copper and steel (ḥod-ldan-lcags) (27–29); the purification of brass (30), bronze (31), lead (32–35) and zinc (36–37); purification in general (38–39); the impurities of gold (40–41); the powers of the Siddhas (42); the preparation of a polish on iron (43–44).

An authority referred to is Candrapakṣa (6: Zla-baḥi phyogs).

The name of the translator is Ratnaśrī, also called O-rgyan-pa.⁹⁸⁴

The *Rasāyanaśāstroddhṛti* may have formed part of Vyāḍipāda's *Rasasiddhiśāstra*.⁹⁸⁵

RASĀYANATARĀṅGIṆĪ.⁹⁸⁶ This treatise, similar to the *Rasaratnākara*, is divided into chapters called tarāṅga; it describes the origin and purification of mercury, alchemical processes regarding gold and the other dhātus, etc.; poisons, aphrodisiacs, oils and ghees are also dealt with.⁹⁸⁷

The *Rasāyanatarāṅgiṇī* was one of the sources of the *Rasavidyāmahārṇava*.

RASĀYANAVIDHĀNA.⁹⁸⁸
 RASĀYANAVIDHI.⁹⁸⁹
 RASĀYANAVIDHI by Nīlakaṇṭha.⁹⁹⁰
 RASĀYANAVIVARAṆA.⁹⁹¹
 RASAYOGAMUKTĀVALĪ, anonymous.⁹⁹²
 RASAYOGAMUKTĀVALĪ by Narahari Bhaṭṭa.⁹⁹³

RASENDRA.⁹⁹⁴ A *Rasendra* is quoted in Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*.

RASENDRABHAIRAVA by Bhairava.⁹⁹⁵
 RASENDRABHĀṆDĀGĀRA by Rasendranātha.⁹⁹⁶

RASENDRABHĀSKARA by Siddha Bhāskara.⁹⁹⁷ Bhāskara is one of the Rasasiddhas in the *Pāradasaṃhitā*, *Rasajalanidhi*, *Rasaratnasamuccaya*, *Rasatarāṅgiṇī*, and *Rasendra-sambhava*.

RASENDRABHĀSKARA by Lakṣmīnārāyaṇa Śarman.⁹⁹⁸
 RASENDRACINTĀMAṆI by Anantadevasūri.⁹⁹⁹
 RASENDRACINTĀMAṆI by Bhagadeva Sūri.¹⁰⁰⁰
 RASENDRACŪḌĀMAṆI, anonymous.¹⁰⁰¹
 RASENDRACŪḌĀMAṆI by Nakimcideva.¹⁰⁰²

RASENDRAKALPADRUMA by Rāmakṣṇabhaṭṭa, son of Nīlakaṇṭhabhaṭṭa.¹⁰⁰³ This work is variously described: it consists of two sections (kāṇḍa), divided into several chapters (adhyāya); the first section (rasakāṇḍa) is about alchemical processes, and the second (prayogakāṇḍa) about the employment of inorganic compounds in various diseases.¹⁰⁰⁴ Another description runs as follows: it consists of two sections, called saṃskāra- and prayogakāṇḍa; the saṃskārakāṇḍa is arranged in six chapters, dealing with (1) rasaśuddhi, (2) mūrchā, (3) bandhana, (4) māraṇa, (5) abhrādisaṃskāra, (6) svarṇādisaṃskāra, prastāra, and yantras.¹⁰⁰⁵ A third author describes it as an exhaustive treatise in four sections, called respectively śuddhi-, mūrchā-, māraṇa-, and bandhakāṇḍa; it is said to give a detailed description of furnaces, retorts, etc.¹⁰⁰⁶

The *Rasendrakalpadruma* is a compilation, containing numerous quotations from *Rasamaṅgala*, *Rasāmṛta*, (*Rasa*)ratnākara, *Rasaratnasamuccaya*, and *Rasārṇava*.¹⁰⁰⁷ Much of its material agrees closely with the *Rasendracintāmaṇi*.¹⁰⁰⁸

Rāmakṣṇabhaṭṭa wrote an auto-commentary, called *Vaidyaratnākara*, on his *Rasendrakalpadruma*.¹⁰⁰⁹

The work is quoted in the *Bṛhadrasarājasundara*, *Kūpīpakvarasanirmāṇavijñāna*, *Pāradasaṃhitā*, Vaidyarāja's *Sukhabodha*,¹⁰¹⁰ and Hazārīlāl Sukul's commentary on the *Rasaratnasamuccaya*; it is one of the sources of the *Rasayogasāgara*.

The author may have been the father of Rāmakavi, who wrote the *Śrīṅgararasodaya*.¹⁰¹¹ One of Rāmakṣṇabhaṭṭa's pupils was Narasiṃha Kavirāja, the author of a number of medical treatises.¹⁰¹²

The *Rasendrakalpadruma* is assigned to the fourteenth,¹⁰¹³ fifteenth,¹⁰¹⁴ or sixteenth century,¹⁰¹⁵ but actually belongs to the middle or second half of the seventeenth century, because the author's father, Nīlakaṇṭha, lived in the period A.D. 1610–1645.¹⁰¹⁶ This chronological position is confirmed by the date of his pupil Narasiṃha Kavirāja, who flourished in the first half of the eighteenth century.

RASENDRAPAṬALA.¹⁰¹⁷

RASENDRARATNAKOṢA by Deveśvara Upādhyāya.¹⁰¹⁸ Recorded among the sources of the *Rasayogasāgara*.¹⁰¹⁹

RASENDRASAṂHITĀ.¹⁰²⁰ Quoted in the *Bṛhadrasarājasundara*,¹⁰²¹ *Rasakāmadhe-nu*,¹⁰²² and Trimalla's *Yogataraṅgiṇī*. Recorded among the sources of the *Rasayogasāgara*.¹⁰²³

RASENDRASAMPRADĀYA by Paṇḍit Hazārīlāl Sukul.¹⁰²⁴
 RASENDRASAMUTPATI.¹⁰²⁵
 RASENDRASĀRASAMGRAHA, anonymous.¹⁰²⁶
 RASENDRASĀRASAMGRAHA by Kṛṣṇacandravaidya.¹⁰²⁷

RASENDRASURAPRBHĀVA by Sūrasena.¹⁰²⁸ Sūrasenaka is one of the Rasasiddhas in the *Pāradasaṃhitā*, *Rasaratnākara*, and *Rasaratnasamuccaya*.¹⁰²⁹

RASENDRATILAKA by Kāyastha Cāmuṇḍa.¹⁰³⁰
 RASENDRAVĀIDYA.¹⁰³¹

RASENDRAVIJÑĀNA by Kavirāja Śrīrāmādarśa Siṃha.¹⁰³² The seven chapters of this recent work deal with: (1) rasa, its śodhana and māraṇa, and the preparation of sindūra; (2) uparasas; (3) dhātus; (4) lohas; (5) ratnas and uparatnas; (6) rasāyana; (7) kṣārāmṛta and lavaṇa.

RASENDRAYOGA.¹⁰³³
 RASENDRODAYA.¹⁰³⁴
 RASENDUŚEKHARA.¹⁰³⁵
 RASENDUTILAKA.¹⁰³⁶
 RASEŚVARANIDHI.¹⁰³⁷

RASEŚVARASIDDHĀNTA.¹⁰³⁸ One of the quotations from this work, found in the *Sarvadarśanasamgraha* (9.7–9), mentions as Siddhas who attained jīvanmukti: Carvaṭi, Govindabhaṅgavatpāda, Govindanāyaka,¹⁰³⁹ Kandalāyana, Kāpāli, Kapila, king So-meśvara, and Vyāli.

G. Hāldār asserts that this treatise was written by Somadeva, the author of the *Rasendracūḍāmaṇi*, in collaboration with his teacher, Acyuta, the son of Goṇikā.¹⁰⁴⁰

RASODAYA by Vināyaka.¹⁰⁴¹ This work, in 8,000 verses, is mentioned in the *Gorakṣasamhitā*.¹⁰⁴²

RASODDHĀRATANTRA. This work, also called *Rasasamhitā*, is a iatrochemical treatise in Sanskrit verse and prose, composed by Caranātīrtha Mahārāja (i.e., Jivram Kālidās).¹⁰⁴³ The Gujarātī version of its Cikitsākhanda, also called *Upacārapaddhati*, was very well received. A Hindī version has also been published.¹⁰⁴⁴

The Hindī version deals with the aetiology, symptomatology and treatment, mainly by means of rasayogas, of the diseases. Sanskrit verses from the *Rasoddhāratāntra* and some other treatises¹⁰⁴⁵ are interspersed among the Hindī prose.

The work is said to be based on the following sources: *Aṣṭāṅgharḍaya*, *Āyurvedaparakāśa*, *Bhaiṣajyaratnāvalī*, *Bhāvaprakāśa*, *Brhannighaṇṭurātānākara*, *Cakradatta*, *Carakasamhitā*, *Gadanigraha*, *Rasakāmadhenu*, *Rasaprakāśasudhākara*, *Rasarājasundara*, (Nityanātha's) *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasendracintāmaṇi*, *Rasendrasārasaṅgraha*, *Śārṅgadharasamhitā*, *Suśrutasamhitā*, *Vaidyajīvana*, *Vaṅgasena*, *Vṇḍamādhava*, *Yogarātānākara*, and *Yogatarāṅgiṇī*.

Additional sources referred to are the *Brhadyogatarāṅgiṇī* and *Yogaśataka*.

The Sanskrit text of the bhasmapīṣṭiprakaraṇa of the *Rasoddhāratāntra*, accompanied by some comments, is reproduced towards the end of the work. It deals with the preparation and medicinal uses of the bhasman (ashes) and pīṣṭi of the following substances: akīka (agate; 1–4),¹⁰⁴⁶ abhraka (mica; 5–18), abhrakasattva (19–28), kāntapāṣāṇa (29–32), kāntaloha (33–47), kāsisa (48–51), kāsisa and godantī¹⁰⁴⁷ (52–54), kukkuṭāṇḍatvac (eggshells; 55–56), kāṁpsya (57–62), kharpara (63–66), godantī (67–69),¹⁰⁴⁸ gomeda (70–73), caturvaṅga (74–79),¹⁰⁴⁹ jaharamoharā (80–85),¹⁰⁵⁰ tāmra (copper; 86–97), tuttha (98–100), trivaṅga (101–105),¹⁰⁵¹ ṭṇakāntamaṇi (106–109),¹⁰⁵² nāga (lead; 110–115), indranīla (sapphire; 116–129), marakata (emerald; 130–142), pittala (143–148), puṣparāga (topaz; 149–157), pañcaloha or vartaloha (158–167), pravāla (coral; 168–175), vaṅga (tin; 176–181), mayūrapicchā (peacock's feathers; 182–185), gaurīpāṣāṇa (186–192), māṇikyā (ruby; 193–199), mākṣikasattva (200–204), muktā (pearls; 205–221), maṇḍūra (222–226), mṛgaśṛṅga (deerhorn; 227–234ab), yaśada (zinc; 234cd–240), rajata (silver; 241–250), loha (iron; 251–255), lohābhra (256–259ab),¹⁰⁵³ varāṭikā (259cd–265), vajra (diamond; 266–272), vaikrānta (273–276),¹⁰⁵⁴ vaidūrya (277–286), śukti (287–288), śaṅkha (289–294), saptaratna and navaratna (296–310), suvarṇa (gold; 311–315), svarṇamākṣika (316–323), saṅgeyaśaba (jade; 324–327), sphāṭika (328–332),¹⁰⁵⁵ haritāla (333–344), and hīṅgula (345–349).

Sources quoted or referred to in this section are: *Āyurvedaparakāśa*, *Brhadyogatarāṅgiṇī*, Govindapādāh (the author of the *Rasaharḍaya*), *Rasaprakāśasudhākara*, (Nityanātha's) *Rasarātānākara*, *Rasaratnasamuccaya*, *Rasatarāṅgiṇī*, and *Yogarātānākara*.

The author repeatedly points to his own experiences in the bhasmapīṣṭiprakaraṇa.

Unusual names of disorders mentioned in the Hindī text are: aṁsughāta (p.402), durjalajanyaroga (p.266–267), jalodara of the head (p.215), mūḍhamāra (p.262–263), and mūtrapīṇḍa (p.301–302).

Uncommon diseases mentioned in formulae from the *Rasoddhāratāntra* in the *Bhe-*

śajasamhitā are: gajagraha (1, nr. 49), ḥṛddāha (7, nr. 78), kaṣṭārtava (6, nrs. 19, 23, 76), phupphusagada (6, nr. 105), phupphusoththaroga (1, nr. 84), mūtrapīṇḍa (6, nr. 35), smaromāda (6, nr. 85), and snāyubhramśa (6, nr. 16). One formula (6, nr. 49: candreśvarīguṭikā) is said to derive from Gorakṣanātha.

RASOPANIṢAD by Umā.¹⁰⁵⁶ This work, said to consist of 6,000 verses, is mentioned in the *Gorakṣasamhitā*.

RASOPARASANIGHAṆṬU.¹⁰⁵⁷

RASOPARASAŚODHANA.¹⁰⁵⁸ This work gives an account of the purification of mercury and other rasas and uparasas for converting them into medicines.¹⁰⁵⁹

RASOTPATTI.¹⁰⁶⁰

RASOTPATTIVIDHI.¹⁰⁶¹

RATNADHĀTUVIJĀNA by Badrīnārāyaṇa Purohita.¹⁰⁶²

RATNĀDIPARĪKṢĀ.¹⁰⁶³

RATNĀDĪPA by Kāśīrāma.¹⁰⁶⁴

RATNĀDĪPIKĀ.¹⁰⁶⁵ A work of this title is quoted in Ṭoḍara's *Āyurvedasaṅkhyā*.

RATNĀDĪPIKĀ by Bhāḍeśvara.¹⁰⁶⁶

RATNĀDĪPIKĀ by Caṇḍeśvara.¹⁰⁶⁷ This treatise, in about 200 verses,¹⁰⁶⁸ arranged in ten chapters (jyotis), describes precious and semi-precious stones.

The subjects of the chapters are: (1; 61 verses) māṅgala (1.1), introduction (1.2–3), the five major (mahārātna)¹⁰⁶⁹ and minor (uparatna) gems¹⁰⁷⁰ and their colours (1.5–8); the diamond (vajra; 1.9–61);¹⁰⁷¹ (2; 26 verses) the pearl (mauktika);¹⁰⁷² (3; 24 verses) the ruby (māṇikyā);¹⁰⁷³ (4; 15 verses) the sapphire (nīla);¹⁰⁷⁴ (5; 35 verses) the emerald (marakata);¹⁰⁷⁵ (6; 6 verses) the zircon (gomeda);¹⁰⁷⁶ (7; 8 verses) the stones called sphāṭika (rock crystal), bhasmanāṅgaka,¹⁰⁷⁷ gāruḍodgāra,¹⁰⁷⁸ tārkṣya,¹⁰⁷⁹ garuḍamaṇi,¹⁰⁸⁰ āstikya,¹⁰⁸¹ and sauvarṇarekhāmaṇi;¹⁰⁸² (8; 6 verses) the cat's eye (vaidūrya) and topaz (puṣparāga);¹⁰⁸³ (9; 4 verses) coral (pravāla);¹⁰⁸⁴ (10; 10 verses) some properties of the stones described and their relationships with the nine grahas.¹⁰⁸⁵

The author discusses the places where each gem is found, its colours and other characteristics, types, good qualities and blemishes, uses, beneficial effects when worn, and the ascertainment of its value.

The five major gems are: diamond, pearl, ruby, sapphire and emerald; the minor gems are zircon, topaz, cat's eye and coral.

Four types, called after the four varṇas (brāhmaṇa, kṣatriya, vaiśya, śūdra) are distinguished of the diamond, ruby, sapphire, emerald and zircon.

A variety of the ruby is called kuruvindaka. Rock crystal (sphāṭika) is said to be of three varieties.

Authorities mentioned are Agastya, Nārada, Varāha,¹⁰⁸⁶ and Vyāsa (1.4 and 10.10). The *Ratnādīpikā* is quoted in Ṭoḍara's *Āyurvedasaṅkhyā*.¹⁰⁸⁷

The author mentions his name in the introductory verses, but does not give any

information on his genealogy. V.W. Karmbelkar, as well as Gairolā and T. Jhā, identify him as the author of a Smṛti digest called *Ratnākara*, divided into seven sections (kṛtya, dāna, vyavahāra, suddhi, pūjā, vivāha, gṛhastha). The author of this work was the son of Vireśvara and belonged to the Ṭhakkura family. Caṇḍeśvara is also credited with a *Rājanīratnākara*.¹⁰⁸⁸ Other works attributed to him are¹⁰⁸⁹ the *Vivādaratnākara*,¹⁰⁹⁰ *Kṛtyacintāmaṇi*,¹⁰⁹¹ *Dānavākyāvalī*,¹⁰⁹² and *Śivavākyāvalī*.¹⁰⁹³

Caṇḍeśvara's literary activity belongs to the fourteenth century.¹⁰⁹⁴

RATNĀKARA.¹⁰⁹⁵

RATNAKUTŪHALA.¹⁰⁹⁶

RATNALAKṢAṆA.¹⁰⁹⁷

RATNAMĀLĀ by Paśupati.¹⁰⁹⁸

RATNAPARĪKṢĀ.¹⁰⁹⁹

RATNAPARĪKṢĀ by Buddhabhaṭṭa or Buddhabhāṭa, also called *Buddhabhaṭṭiyaratnaśāstra*.¹¹⁰⁰ This treatise,¹¹⁰¹ in about 225 verses, arranged in nine chapters, deals with: (1) the origin of gems (2–15); the diamond (vajra; 16–48); (2) the pearl (mauktika; 1–60); (3) the ruby (padmarāga; 1–31); (4) the emerald (marakata; 1–29); (5) the sapphire (indranīla; 1–20); (6) the cat's eye (vaidūrya; 1–16);¹¹⁰² (7) the chrysoberyl (karketana; 1–3); (8) the garnet (pulaka; 1–3);¹¹⁰³ (9) coral (vidrūma; 1–4).

The author describes the mythical origin of each gem, the places where it is found, its characteristics, blemishes, curative and other properties, the ascertainment of the value, etc. Stones resembling the real ones, but much less in value, as well as counterfeit gems, are also discussed.¹¹⁰⁴

The four types of diamonds, called after the varṇas (brāhmaṇa, kṣatriya, vaiśya, śūdra), are known to the author; the other gems are not classified after this model.

Buddhabhaṭṭa is referred to as an authority on gems in Ṭhakkura Pherū's *Rayanaparikkhā*. Buddhabhaṭṭa's *Ratnaparīkṣā* is mentioned in Merutuṅga's *Prabandhacintāmaṇi*.¹¹⁰⁵ The *Ratnaparīkṣā* quoted in Somadeva's *Yasastilaka* is Buddhabhaṭṭa's work.¹¹⁰⁶

The *Garuḍapurāṇa* (chapters 68–80) incorporated the whole text of Buddhabhaṭṭa's work; the version forming part of the *Garuḍapurāṇa* has two extra chapters, on puṣparāga (topaz; 74) and bhīṣmaratna (a kind of quartz; 76).

The author, Buddhabhaṭṭa, who mentions his name in the introductory verses and at the end of his work, is by some regarded as a Buddhist,¹¹⁰⁷ although no traces of Buddhism are found in the text of edition b; on the contrary, all the allusions to mythology are inspired by Hindu traditions.

Clues to Buddhabhaṭṭa's chronological position are rare. Some assign him to the close of the fifth or the beginning of the sixth century,¹¹⁰⁸ others to the seventh or eighth,¹¹⁰⁹ or to the twelfth century.¹¹¹⁰ The reference to Buddhabhaṭṭa in Ṭhakkura Pherū's *Rayanaparikkhā* establishes that the former is earlier than the beginning of the fourteenth century.

The contents of Buddhabhaṭṭa's treatise are said to resemble those of the chapters on the same subject (80–83) of the *Bṛhatsaṃhitā*; L. Finot supposed them to be based

on a *Ratnaśāstra* anterior to the sixth century.¹¹¹¹

RATNAPARĪKṢĀ by Īśvaradīkṣita.¹¹¹² This work, in 105 verses, interspersed with some prose, quotes from and refers to the following sources: Agastya (2), Āgastya (92), Āgastyaratnaśāstra (11), Āṅgīrasamata (84), Bhāradvājasṃṛti (22), Nighaṇṭu (33), Ratnasārasaṃgraha (81), Ratnaśāstra (8; 68), Utpalaparimāla (34),¹¹¹³ Vāhaṇa (41), and Viśvakarmīya (70; 91).

The arrangement of the contents is very unsystematic. Mythological tales about the origin of gems abound.

Some subjects dealt with are: gems to be discarded due to the presence of particular defects (20cd–22a), the seven defects of gems: bindu, āvarta, tuṣa, trāsa, lekḥā, kalaṅka, and kīlaka (22b–30ab),¹¹¹⁴ the four types of sphaṭika: gomedaka, puṣparāga, vaidūrya, and śītaruṇmaṇi¹¹¹⁵ (30c–f), the twenty-two types of ratna according to the *Utpalaparimāla* (34–35), the five defects of gems: kāṣa, trāsa, bindu, rekḥā, and jala-garbhata (59),¹¹¹⁶ and good qualities and defects associated with each of the five mahābhūtas (70–80).

RATNAPARĪKṢĀ by Rāmacandra.¹¹¹⁷

RATNAPARĪKṢĀ by Soma.¹¹¹⁸ This work, written in Prakrit, consists of 146 verses: 22 verses on ratnaparīkṣā, 48 on mauktikaparīkṣā, 17 on māṇikyaparīkṣā, and 12 on marakataparīkṣā.

The same author's *Dhātuvādaprakaraṇa*, which is an appendix to the *Ratnaparīkṣā*, gives a detailed account of transmuting copper into gold.

Soma may have lived in the fourteenth century.¹¹¹⁹

RATNAPARĪKṢĀ by Tattvakumāra Muni.¹¹²⁰

RATNAPARĪKṢĀ by Vācaka Ratnaśekhara.¹¹²¹

RATNAPARĪKṢĀ by Vamśeśvara.¹¹²²

RATNAPARĪKṢĀSAMUCCAYA.¹¹²³

RATNAPARĪKṢĀṬĪKĀ.¹¹²⁴

RATNAPARĪKṢĀVIDHĀNA.¹¹²⁵

RATNAPRADĪPANIGHAṆṬU.¹¹²⁶

RATNAPRADĪPIKĀ by Bharadvāja.¹¹²⁷

RATNAPRAKARAṆA.¹¹²⁸

RATNASĀGARA.¹¹²⁹

RATNASAMGRAHA.¹¹³⁰ This work, in twenty-two verses, deals with: vajra (1–5), mauktika (6–7), padmarāga (8–9), indranīla (10–11), marakata (12–13), vaidūrya (14), lasuna (15), puṣyarāga (16), gameda (17), sphaṭika (18), masāramaṇi (19),¹¹³¹ and peroṇā (20).

RATNASAMUCCAYA, anonymous.¹¹³²

RATNASAMUCCAYA by Nāmadeva.¹¹³³

RATNASĀRACINTĀMAṆI.¹¹³⁴

RATNAŚĀSTRA.¹¹³⁵

RATNAŚĀSTRA by Buddhahṭṭa.¹¹³⁶

RATNAUṢADHAYOGA.¹¹³⁷

RATNĀVALLI.¹¹³⁸

RATNAVIJÑĀNA by Puruṣottamadāsa Svāmin.¹¹³⁹

RATNAVIJÑĀNA by Rādhākṛṣṇapārāśara.¹¹⁴⁰

RAYAṆAPARIKKHĀ by Ṭhakkura Pherū.¹¹⁴¹ This treatise, in 132 Prakrit verses (gāthā), deals with precious and semi-precious stones. Its subjects are: the mythical origin of gems (6–11); the natural origin of gems (12); the relationships between the nine major gems and the nine grahas (13–15); the effects of wearing gems (16–18); the contents of the work (19); the diamond (vajra = Sanskrit vajra; 20–38); pearls (muttāhala = Sanskrit muktāphala; 39–54); the ruby (pāmarāya = Sanskrit padmarāga, or māṇikka = Sanskrit māṇikya; 55–70); the emerald (maragaya = Sanskrit marakata; 71–80); the sapphire (mahendranīla = Sanskrit mahendranīla; 81–87); coral (vidduma = Sanskrit vidrūma, or pavālaya = Sanskrit pravālaka; 90–91); lhasapiya (= Sanskrit laśunaka; 92–93);¹¹⁴² vaiḍujja (= Sanskrit vaiḍūrya; 94);¹¹⁴³ rock crystal (phaliha = Sanskrit sphatika; 95–96); the topaz (puṃsarāya = Sanskrit puṃparāga; 97); the chrysoberyl (kakkeyana = Sanskrit karketana; 98); bhīsama (= Sanskrit bhīṣma; 99);¹¹⁴⁴ the zircon (gomeya = Sanskrit gomeda; 100); some generalities on gems (101–102); the three gems imported from Persia: the spinel (lāla),¹¹⁴⁵ carnelian (akīyā = Sanskrit akīka) and turquoise (perujjā = Sanskrit peroja; 103–105);¹¹⁴⁶ the experts (maṇḍaliya = Sanskrit māṇḍalika) and their trade (106–111); weights (112); the prices of gems (113–130).¹¹⁴⁷

Authorities mentioned are Agastya, Buddhahṭṭa and Suramantrin (= Brhaspati) (3).

The five most excellent gems (mahāratna) are the diamond, pearl, ruby, emerald, and sapphire (88); the seven minor gems (uparatna) are coral, lhasapiya, vaiḍujja, rock crystal, topaz, chrysoberyl, and bhīsama (89).

The details of the myth about the origin of gems from the body of the demon Bala differ in some respects from the account in Buddhahṭṭa's *Ratnaśāstra*.¹¹⁴⁸

The kuruvinda is mentioned as a stone able to scratch a sapphire (36).¹¹⁴⁹ Methods to detect counterfeit diamonds (kūḍavajja = Sanskrit kūṭavajra) are described (37–38).

The traditional eight sources of pearls are enumerated and described (39–48). The list of pearl fisheries (49) differs from comparable lists in other sources.

The word cunnī as a synonym of māṇikya (ruby) is only found in Ṭhakkura Pherū's work (56), which also adds a fifth variety of ruby, called jāmuṇiya, to the usual four (56). Peculiar to the *Rayanaparikkhā* are the five varieties of the emerald: garuḍodgāra,¹¹⁵⁰ kiḍāūthī, vāsūthī, mūgaūnī and dhūlimarāī (72–75). The verses on rock crystal mention ravikānta (= sūryakānta)¹¹⁵¹ and śaśikānta (= candrakānta) as varieties (96). Karketana is said to be found in a country called Pavanuppathāna (98).¹¹⁵² The zircon is described as occurring in Sirināyakula,¹¹⁵³ Parevaga,¹¹⁵⁴ and the river Navvuyā (= Sanskrit Narmadā; 100). The spinel is found in Vandankhasāna,¹¹⁵⁵ the carnelian in Yamana,¹¹⁵⁶ the turquoise in Nīsāvāra¹¹⁵⁷ and Muvāsira.¹¹⁵⁸

A text known as *Sirirayanaparikkhāpayaraṇa*¹¹⁵⁹ (= Sanskrit *Śīratnaparīkṣā-prakaraṇa*) is an abridgment and adaptation of the *Rayanaparikkhā* by some later author, who also incorporated Ṭhakkura Pherū's *Dhātūtpatti*.

The author¹¹⁶⁰ mentions his name, Pherū, at the beginning and end of his treatise. His father was Ṭhakkura Canda (= Sanskrit Candra) of Sirimālakula;¹¹⁶¹ his grandfather was Kāliāa (= Sanskrit Kāliyaka), a merchant (siṭṭha) of the Siridhandhakula, who lived in Kannānapura.¹¹⁶² This information establishes that the author belonged to the Kharataragaccha of Śvetāmbara Jains.

Ṭhakkura Pherū¹¹⁶³ wrote his *Rayanaparikkhā* for the benefit of his son Hemapālaka.

The author mentions that he had the opportunity to observe the collection of gems in the treasury of Allāvādīna,¹¹⁶⁴ the cakravartin of the Kali age.¹¹⁶⁵

Other works by the same author are the *Dhātūtpatti*, *Dravyaparīkṣā*, *Gaṇitasāra*, *Jyotiṣasāra*, *Kharataragacchayugapradhānacatuḥpadikā*, and *Vāstusāra*.¹¹⁶⁶

The *Rayanaparikkhā* was completed in Delhi in A.D. 1315/16.¹¹⁶⁷

ṚṢIŚRĠGATANTRA.¹¹⁶⁸

RUDRAYĀMALA.¹¹⁶⁹ This work, belonging to the Yāmala class of Tantric literature,¹¹⁷⁰ contains material belonging to the domain of rasaśāstra. The *Rudrayāmala* is quoted in the *Kūṭīpakvarasanirmānavijñāna*, *Rasakāmadhenu*, *Rasatattvavivecana*, and in Somadevaśarman's commentaries on the *Āyurvedaprakāśa*.

Well-known are¹¹⁷¹ the *Dhātukriyā*,¹¹⁷² *Rasakalpa*,¹¹⁷³ and *Rasārṇavakalpa*¹¹⁷⁴ from the *Rudrayāmala*. Other parts are an *Auśadhikālpa*,¹¹⁷⁵ various kalpas,¹¹⁷⁶ and a *Sarvajvaravipākā*.¹¹⁷⁷

The fragmentary *Auśadhikālpa* contains the following kalpas: vijayā-, uccatā-, nāgadamanī- (or īśvarī-), vajravallī-, vajradantī-, asthikarṇī-, nīlī-, and śailodakakalpa;¹¹⁷⁸ these kalpas are followed by verses on saṃkoca, drāvāṇa, keśarañjana, dhātumāraṇa, and bhasmasūtaka.

The *Rasakalpa* of the *Rudrayāmala* is placed in the thirteenth century.¹¹⁷⁹

An appendix (parīśiṣṭa) to the *Rasakalpa* was written by Kāśikara.¹¹⁸⁰

An anonymous *Rasaratnākara* is also said to derive from the *Rudrayāmala*.¹¹⁸¹

SADYOGAKAṆṬHIKĀ by Govindācārya.¹¹⁸²

SAHASRARASADARPAṆA by Bhallāsvāmin.¹¹⁸³

ŚAIVĀLABHAKṢYA is the name of an author or work quoted by Ṭoḍara.¹¹⁸⁴

ŚAṆKHADRĀVAKAVIDHĀNA.¹¹⁸⁵

The SARVADARŚANASAMGRAHA by Mādhava¹¹⁸⁶ contains a chapter (9), called Raseśvaradarśana, that deals with alchemy and its philosophical basis.¹¹⁸⁷

Authorities and works, connected with rasaśāstra, and quoted or referred to, are Govindabagavatpāda (4; prose after 16–17), *Rasahrdaya* (5; 20–22), *Rasārṇava* (1cd–2; 3; 18–19; 27–28), *Raseśvarasiddhānta* (7–9; 23–24),¹¹⁸⁸ and *Sarvajña-rāmeśvara* (prose after 16–17).¹¹⁸⁹ The *Rasahrdaya* is also quoted anonymously (31–33).

Other authorities mentioned are Sanaka, Śrīkāntamiśra,¹¹⁹⁰ Viṣṇusvāmin and his *Sākārasiddhi*.¹¹⁹¹

The *Raseśvaradarśana* is quoted in Āśubodha and Nityabodha Senagupta's commentary on the *Rasaratnasamuccaya*.

The eighteen saṃskāras of mercury are according to the *Sarvadarśanasamgraha* (16–17): svedana, mardana, murchana, sthāpana, pātana, nirodha, niyama, dīpana, gamana, grāsapramāṇa, jāraṇa, pidhāna, garbhadruti, bāhyadruti, kṣāraṇa, saṃrāga, sārāṇa, krāmaṇa (together with vedha, and followed by bhakṣaṇa).¹¹⁹²

Three hypotheses have been formulated concerning the authorship of the *Sarvadarśanasamgraha*, traditionally attributed to a Mādhava. This author was either the brother of Sāyaṇa, the famous commentator on the Vedas, or the son of Sāyaṇa, or the same as Cennu Bhaṭṭa. Sāyaṇa's brother Mādhava, also known as Vidyāraṇya, was a minister of the Vijayanagar kings Bukka I (A.D. 1356 or 1357 to 1377)¹¹⁹³ and Harihara II (A.D. 1377–1404),¹¹⁹⁴ but became a saṃnyāsī in 1391 and held the office of abbot of the Śringeri monastery.¹¹⁹⁵

SARVEŚVARARASĀYANAROGA HARAPARIPUṢṬAKA,¹¹⁹⁶ lost in its Sanskrit original, is a short treatise, preserved in a Tibetan translation. The Tibetan title is: *Thams-cad-kyi dbaṅ-phyug bcud-len nad thams-cad hjom sñi lus-kyi stobs rgyas-par byed-pa*.¹¹⁹⁷

The author is Dbaṅ-phyug (= Sanskrit Īśvara).¹¹⁹⁸ The translators were Śivadāsa of Haridvāra and Rin-chen dpal (Ratnaśrī) of Oḍḍiyāna.

The subjects dealt with are: the purification of mercury (1–3), copper (4–5) and tin (6); the killing of iron (7) and mica (8); a prescription against skin diseases (10); the purification of silver (11); the killing of lead (12); the purification of gold (13); the killing of a substance called supakita (14);¹¹⁹⁹ the preparation of some rasāyana pills (15–16).¹²⁰⁰

ŚATAJĀRAṆASINDŪRA.¹²⁰¹

SIDDHALAKṢMĪŚVARATANTRA.¹²⁰² Quoted in the *Āyurvedaprakāśa*, *Pāradasamhitā*, the *Rasendracintāmaṇi*, and Trimalla's *Bṛhadyogatarāṅgī*.

SIDDHARATNĀKĀRA.¹²⁰³

SIDDHASĀRATANTRA by Nīśācarabhāṭṭācārya.¹²⁰⁴ This work deals with the following subjects: mahāgūḍhasiddhi, guruprāpti, śiṣyalakṣaṇa, maṇḍapavidhāna, balividhāna, mṛdvikalpa, mūṣāvīracana, upaskaraṇavidhi, vahnīkarmavidhi, mahārasoparasa-kathana, dravyaśodhana, loharāñjana, lohamāraṇa, sattvapātana, dvandvamelana, gaganadrāvaṇa,¹²⁰⁵ hematārākṣṭipradarśana, svedanādhikāra, bijavyutpatti, vidādhikāra, khagayuktyadhikāra, sārādhikāra, krāmaṇakaraṇa, varṇotkarṣādhikāra, mṛdūkaraṇādhikāra, and rasasiddhiprayoga. The author refers to Nāgārjuna.¹²⁰⁶

SIDDHATANTRA.¹²⁰⁷

SINDŪRAPRAKARAṆA by Somaprabhasūri.¹²⁰⁸

ŚUDDHIPRAKARAṆA.¹²⁰⁹

ŚŪLAKASIMHAVIDHĀNA.¹²¹⁰

SŪTAMAHODADHI.¹²¹¹ Quoted in Rāmarāja's *Rasaratnapradīpa*, the *Rasarājalakṣmī*, Ṭoḍara's *Āyurvedasaukhya*, and Viṭṭala's *Rasasindhu*. This work proves to be earlier than the third quarter of the fourteenth century, in which the *Rasarājalakṣmī* was composed.

SŪTAPRADĪPIKĀ.¹²¹² This work mentions thirteen major poisonous substances and six minor ones (upaviṣa).¹²¹³ The *Sūtapradīpikā* is mentioned among the sources of the *Rasayogasāgara*.¹²¹⁴

SŪTARĀJA.¹²¹⁵ One of the sources of the *Ratnākaraśayogagrantha*. A *Sūtārāja* is mentioned in Revaṇasiddha's *Vīrabhaṭṭīya*.

SŪTARĀJARASA.¹²¹⁶

SŪTĀRŪVA.¹²¹⁷ Quoted in the *Rasasindhu* and Ṭoḍara's *Āyurvedasaukhya*. The reference to the *Sūtārūva* in the *Rasasindhu* indicates that the former is earlier than the third quarter of the fourteenth century.

SUVAṆNABHASMVIDHĀNA.¹²¹⁸

SUVAṆNANIRMĀṆVIDHI.¹²¹⁹

SUVAṆNARAUPYASIDDHISĀSTRA by Jinadattasūri, a Jain monk belonging to the Kharataragaccha.¹²²⁰

SUVAṆNASĀRA.¹²²¹

SUVAṆNATANTRA or *Svarṇatantra*.¹²²² This text was revealed by Śiva to Paraśurāma, who, rendered destitute after donating all his worldly possessions to Kaśyapa, acquired from Śiva the means of transforming mercury into gold.¹²²³ The introductory verses mention that, earlier already, Śiva transmitted to Paraśurāma the *Ratnatātra*, the knowledge about 2,000 guṭikās, 600 forms of mercury, eight dhātukalpas, and the dhātuyogākyakalpa.¹²²⁴ The *Suvarṇatantra* contains the kākarī-, āngāra- and śvetabrhatīkalpas,¹²²⁵ and describes five varieties of (śaṅkha)drāva and their uses.¹²²⁶ A plant that is regarded as an essential ingredient of a mercurial preparation is called tailakanda.¹²²⁷

The *Suvarṇatantra* is regarded as posterior to the sixteenth century.¹²²⁸

SVACCHANDABHAIRAVA by Balabhadra.¹²²⁹ Some rasayogas are called after Svachchandabhairava.¹²³⁰ He is a Rasasiddha in the *Pāradasamhitā*, *Rasaratnasamuccaya*, *Rasatarāṅgī*, and *Rasendrasambhava*.

SVARNADĪPIKĀ.¹²³¹ This small treatise describes the transmutation of base metals into gold or silver.¹²³²

- SVARNAKĀRAMĀRAṆA.¹²³³
 SVARNAMUKTĀRASAVYĀKHYĀ.¹²³⁴
 SVARNĀPAÑCĀMṚTARASAYOGA.¹²³⁵
 ŚVETĀŚVARASABADDHAKALKAVIDHĀNA by Somanātha.¹²³⁶
 TĀLAKAMĀRAṆA.¹²³⁷
 TĀLAKEŚVARARASA.¹²³⁸
 TĀMRABHASMASINDŪRAVIDHI.¹²³⁹
 TĀMRABHASMAVIDHI.¹²⁴⁰
 TĀMRĀKALPA.¹²⁴¹
 TĀMRAŚUDDHIVIDHĀNA.¹²⁴²
 TĀMRAVANA by Muṇḍin.¹²⁴³
 TANTRARĀJA by Jābāla.¹²⁴⁴
 TANTRASĀRAKOṢA by Śaṅkunāthadatta.¹²⁴⁵
 TĀRAKRIYĀ.¹²⁴⁶
 TRAILOKYACINTĀMAṆI.¹²⁴⁷
 TRAILOKYACINTĀMAṆIGUṬIKĀNIRMĀṆAVIDHI.¹²⁴⁸
 TRAILOKYACINTĀMAṆIRASANIRŪPAṆA.¹²⁴⁹
 TRAILOKYACINTĀMAṆIRASAYOGA.¹²⁵⁰
 TUTTHABHASMAVIDHI.¹²⁵¹
 UDAYABHĀSKARARASA.¹²⁵²
 UPADHĀTUMĀRAṆA.¹²⁵³
 UPARASAPRAKARAṆA.¹²⁵⁴
- UTTANĀKADARPAṆA.¹²⁵⁵ The larger part of this text has been borrowed from Trimala's *Yogatarāṅgiṇī*.¹²⁵⁶
- VAIDYA.¹²⁵⁷
 VAIDYAGRANTHA.¹²⁵⁸
 VAIDYAKARASARĀJAMAHODAYA, compiled by Nārāyaṇaprasāda Miśra.¹²⁵⁹
- VAIDYAKASAMGRAHA.¹²⁶⁰ An anonymous work, dealing with rasas only. It quotes the *Rasaratnākara*, (*Śāringadhara*)*samhitā* and *Yogaratanasamuccaya*.¹²⁶¹
- VAIDYĀMṚTA by Nārāyaṇa.¹²⁶²
 VAIDYARASĀYANA.¹²⁶³
 VAIDYAVIṢAYA.¹²⁶⁴
 VAJRAKṢĀRAVIDHĀNA.¹²⁶⁵
 VAṆGABHASMANIRMĀNACIKITSĀKRAMA.¹²⁶⁶
 VAṆGABHASMAVIDHĀNA.¹²⁶⁷
 VAṆGAMĀRAṆA.¹²⁶⁸
- VARNARATNĀKARA by Jyotirīśvara Ṭhakkura. This work describes eighteen ratnas and thirty-two uparatnas.¹²⁶⁹

- VASANTACANDRODAYA.¹²⁷⁰
 VASANTAKUSUMĀKARĀDIYOGĀḤ.¹²⁷¹
 VASANTAKUSUMĀKARAYOGA.¹²⁷²
 VĀSUDEVASAMHITĀ by Vāsudeva.¹²⁷³
 VICITRARASAPRAYOGANIRŪPAṆA.¹²⁷⁴
 VIVIDHARASANIRMĀNACIKITSĀ.¹²⁷⁵
 VRAṆĀṆKUSARASA.¹²⁷⁶
 YANTRACŪPĀMAṆI.¹²⁷⁷
 YANTRODDHĀRA.¹²⁷⁸
 YAVANAJĀTAKA by Sphujidhvaja.¹²⁷⁹
 YOGARATNĀKARA by Keśavadeva.¹²⁸⁰
 YOGASĀRA.¹²⁸¹

YUKTIKALPATARU by Bhojarāja. This treatise contains an alamkārayukti, which deals with ratnaśāstra. Its subjects are: the mythical origin of gems (47–51; from the *Garuḍapurāṇa*); an enumeration of gems: vajra, marakata, padmarāga, mauktika, indranīla, mahānīla,¹²⁸² vaidūrya, gandhasaṃjñaka, candrakānta,¹²⁸³ sūryakānta,¹²⁸⁴ sphāṭika, pulaka, karketa, puṣparāga, jyotīrasa,¹²⁸⁵ sphāṭika (again), rājāvarta,¹²⁸⁶ rājāmaya,¹²⁸⁷ saugandhika,¹²⁸⁸ gandha (or gañja), śaṅkha, brahmamaya,¹²⁸⁹ gomeda, rudhirākhyā, bhallātaka,¹²⁹⁰ dhūlī, marakata (again), tutthaka, sīsa, pīlu¹²⁹¹ (or pīta),¹²⁹² pravālaka, girivajra, bhāskara (or bhārgava, or bhāṅgura), bhujaṅgamaṇi,¹²⁹³ vajramaṇi, tittira (or tittibha),¹²⁹⁴ pīta, bhrāmara, utpala¹²⁹⁵ (52–57; from the *Viṣṇudharmottara*);¹²⁹⁶ padmarāga (58–121); vajra (122–219; 140–157 is from the *Garuḍapurāṇa*; 158–159 is from the *Viṣṇudharmottara* and *Agnipurāṇa*; 160–166 is from the *Garuḍapurāṇa*; vidruma (220–233); gomeda (234–242); muktā (243–366; 251–294 is from the *Garuḍapurāṇa*; 310–315 is from the *Matsyapurāṇa*; 316–320 is from the *Garuḍapurāṇa*); vaidūrya (367–394); indranīla (395–431; from the *Garuḍapurāṇa*); marakata (432–471; from the *Garuḍapurāṇa*); puṣparāga (472–478ab); karketana (478cd–484; from the *Garuḍapurāṇa*); bhīṣmamaṇi (485–494; from the *Garuḍapurāṇa*); pulaka (495–498); rudhirākhyā (499–501); sphāṭika (502–513; from the *Garuḍapurāṇa*); ayaskānta (514–515); śaṅkha (517–525).

Appendices

Appendix 1 Authorities associated with formulae

AGNI¹

ĀNANDAKANTHAḌĪ

saṃnipātabhairavarasa (*Bhaiṣajyaratnāvalī*, jvara 734–742).

ĀNANDAKARPAḌĪ

saṃnipātabhairavarasa (*Bṛhadrasarājasundara* 286).

ĀNANDANĀTHA

vātaavidhvarṣanarasa (*Bṛhadrasarājasundara* 452–453).

ANNAMPOTAMADĀSA

ajirṇagajāṅkuṣa (*Rasayogasāgara*, akārādi 97: from *Ratnākaraśadhayoga*).

AṢṬĀVAKRA

aṣṭāvakarasa (*Rasayogasāgara*, akārādi 278).

ĀSTĪKA²

an agada (*Cikitsākalikā* 387).

mahāpadmakaghṛta (*Mādhavacikitsā*, visarpavisphoṭa 21).

padmakādiḡhṛta (*Vaidyacintāmaṇi* 480).

padmakaghṛta (*Yogarātnākara* 715).

AŚVINS³

recipe without a name (Anantakumāra's *Yogarātnasamuccaya* 24.568–572).

agnikumāraraśa (*Rasayogasāgara*, akārādi 35).

amṛtādiḡhṛta (*Bhāratabhaiṣajyaratnākara*, Nr. 167; *Vaidyacintāmaṇi* 377–378).

amṛtādiguggulu (*Bhāratabhaiṣajyaratnākara*, Nr. 136).

amṛtādyaghṛta (*Bhaiṣajyaratnāvalī*, vātarakta 131–137; *Bhāvaprakāśa*, cikitsā 29.102–108; *Ṭoḍara* V: 12.43–49).

amṛtādyaguggulu (*Bheṣajasaṃhitā* 6, Nr. 7; *Bṛhadyogatarāṅgiṇī* 91.65–71; *Yogarātnākara* 476–477).

amṛtāguggulu (*Bhaiṣajyaratnāvalī*, vātarakta 84–90; *Bhāvaprakāśa*, cikitsā 29.183–190; *Sahasrayoga* 214–215).

amṛtākhyaguggulu (*Ṭoḍara* V: 12.77–84).

amṛtaprāśa (*Bhaiṣajyaratnāvalī*, rājayakṣman 275–280; *Ṭoḍara* IV: 8.89–93).
 amṛtataila (Bower MS II.418–425).
 aṅkolabījataila (*Bhāratabhaiṣajyaratnākara*, Nr. 8855).
 aśvagandhābasti (Bower MS II.618–625).
 aśvagandhāpāka (*Bhāratabhaiṣajyaratnākara*, Nr. 8992; *Bṛhadyogatarāṅgiṇī* 147.38–42; *Pākapradīpa* 388–392; *Rasayogasāgara*, akārādi 268).
 āśvinarasāyana (Bower MS II.773–781).
 āśvinayoga (Bower MS II.418–425).
 ayaḥpatirasa (Cat. Madras Nr. 13140; *Cikitsāsārasaṃgraha*).
 ayorājayoga (HIM I, 149 and 157).
 bālasūryodayarasa (Cat. Madras Nr. 13221; *Vaidyagrantha*).
 balāśvagandhāditailla (*Sahasrayoga* 79–80).
 bhaktottaracūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 4936; *Rasayogasāgara*, pakārādi 405).
 bhaktottariyacūrṇa (*Bhaiṣajyaratnāvalī*, vṛddhi 59–64).
 bhallātakarasāyana (*Rasayogasāgara*, pakārādi 412).
 bhārgyabhayāvaleha (*Cikitsākalikā* 225–228).
 bhāringharitakyavaleha (*Yogatarāṅgiṇī* 30.3–5: expounded by the two Bhiṣagvaras to Purandara).
 bilvatailla (*Rasaratnādīpikā*, 148).
 bindughṛta (Bower MS II.287–312).
 bṛhadagnimukhacūrṇa (*Bṛhannighaṇṭuratanākara* V, 18: ajirṇa; *Gadanigraha* I, cūrṇa 128–139).
 bṛhdaśvagandhādyaghṛta (*Bṛhadyogatarāṅgiṇī* 147.77–88; *Vaṅgasena*, vājīkaraṇa 22–33).
 bṛhaddādimādyaghṛta (*Bhaiṣajyaratnāvalī*, prameha 208–216; *Bhāratabhaiṣajyaratnākara*, Nr. 6762).
 bṛhadguḍapippalī (*Bhaiṣajyaratnāvalī*, plīhayakṛt 53–57; *Dhanvantari*, udara 42; *Rasarājasundara* 501; *Rasendrasārasaṃgraha*, plīharoga 65–70).
 bṛhadvāsāvaleha (*Bhaiṣajyaratnāvalī*, rājayakṣman 40–45; *Sahasrayoga* 192).
 bṛhallākṣāditailla (*Bhaiṣajyaratnāvalī*, jvara 1336–1340).
 bṛhallavaṅgādicūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 6353; *Rasayogasāgara*, yakārādi 216).
 bṛhanmusalīpāka (*Pākapradīpa* 55–68).
 bṛhannārikelakhaṇḍa (*Bhāvaprakāśa*, cikitsā 10.27–35; HIM I, 150 and 170–171; *Pākapradīpa* 374–382).
 bṛhatsindūrādyatailla (*Bṛhadyogatarāṅgiṇī* 120.24–27; *Rasakāmadhenu* IV.40.583–585; *Yogaratnākara* 694; *Vaidyacinṭāmaṇi* 466–467).
 candanādicūrṇa (*Bhaiṣajyaratnāvalī*, pradara 20–24; *Bhāratabhaiṣajyaratnākara*, Nr. 1698; *Rasaratnākara* II, pradara 12–17; *Vaidyacinṭāmaṇi* 224; *Yogaratnākara* 307; *Yogatarāṅgiṇī* 26.17–23).
 candanādivaṭaka (*Vaidyacinṭāmaṇi* 118).
 candanādyacūrṇa (*Gadanigraha* I, cūrṇa 64–69; *Vaṅgasena*, raktapitta 93–98).
 citrakādyacūrṇa (*Rasaratnākara* II, śūla 33–40).

citrakaharītakī (*Ṭoḍara* VII: 15.49–55).
 citrakaharītakyavaleha (*Gadanigraha* I, leha 124–131ab).
 dādimādyaghṛta (*Bhaiṣajyaratnāvalī*, prameha 203–207; *Bhāratabhaiṣajyaratnākara*, Nr. 3056; *Bhāvaprakāśa*, cikitsā 38.76–80; *Ṭoḍara* VI: 9.87–91).
 dādimāvaleha (*Bhāratabhaiṣajyaratnākara*, Nr. 3020).
 daśamūlatailla (*Bhāratabhaiṣajyaratnākara*, Nr. 3088).
 daśāṅgatailla (*Bhāratabhaiṣajyaratnākara*, Nr. 3098; *Gadanigraha* I, tailla 159–167).
 godhūmādyaghṛta (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 277–287; *Siddhayoga* 70.22–30).
 guḍakūṣmāṇḍaka (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 173–179; *Siddhayoga* 70.34–40).
 guḍakūṣmāṇḍāvaleha (*Bṛhadyogatarāṅgiṇī* 147.21cd–27).
 guḍapippalī (*Dhanvantari*, udara 30; *Rasaratnādīpikā* 362–363).
 guḍapippalīmodaka (*Bhāratabhaiṣajyaratnākara*, Nr. 1307).
 guḍūcītailla (*Cikitsākalikā* 306).
 gulmacūrṇa (Bower MS II.96–101).
 haridrācūrṇa (Bower MS II.216–222).
 haritakyavaleha (*Gadanigraha* I, leha 138–140).
 hastikarṇīrasāyana (*Vaidyacinṭāmaṇi* 96).
 hemagarbharasāyana (*Rasayogasāgara*, śakārādi 640).
 jambvādikasarpis (Anantakumāra's *Yogaratnasamuccaya* 9.713–720).
 jvaraharaghṛta (Bower MS II.241–244).
 kapikacchūpāka (*Pākapradīpa* 424–430).
 ketakītailla (*Vaidyacinṭāmaṇi* 240).
 khaṇḍakūṣmāṇḍa (*Rasaratnākara* II, raktapitta 52–59; *Siddhayoga* 9.49–56; *Ṭoḍara* IV: 7.101–107).
 kṛmikuṭhārarasa (*Rasayogasāgara*, kakārādi 321).
 kṣīrayoga (HIM I, 149 and 157).
 kṣudhārākṣasatailla (D. Suresh Kumar, 1990: 100: from *Dhanvantari*).
 kumārīpāka (*Bhāratabhaiṣajyaratnākara*, Nr. 816; *Pākapradīpa* 326–335; *Rasayogasāgara*, kakārādi 276).
 kunkumādyatailla (*Bhaiṣajyaratnāvalī*, kṣudraroga 115–120; *Bhāratabhaiṣajyaratnākara*, Nr. 871; *Bṛhadyogatarāṅgiṇī* 127.113–119ab; *Dhanvantari*, kṣudraroga 46; *Ṭoḍara* VII: 12.116–121).
 kūṣmāṇḍādilehya (*Vaidyacinṭāmaṇi* 225).
 kūṣmāṇḍakarasāyana (A.h.Ci.3.114–118ab; A.s.Ci.4.61–65; *Mādhavacikitsā*, raktapitta 29 and 30; *Yogatarāṅgiṇī* 26.24–29).
 kūṣmāṇḍakhaṇḍa (*Bhaiṣajyaratnāvalī*, raktapitta 94–101).
 kūṣmāṇḍarasāyana (*Sahasrayoga* 177).
 kūṣmāṇḍāvaleha (*Bṛhadyogatarāṅgiṇī* 75.72–78; *Gadanigraha* I, leha 15–20; *Rasayogasāgara*, kakārādi 314; *Yogaratnākara* 307).
 kuṣṭhārākṣasatailla (*Bhaiṣajyaratnāvalī*, kuṣṭha 294–298; *Dhanvantari*, kuṣṭha 54).
 kuṣṭhatailla (*Bhāratabhaiṣajyaratnākara*, Nr. 878).
 laghucīṇḍādilehya (*Vaidyacinṭāmaṇi* 120–121).
 laghucīṇḍāleha (*Rasayogasāgara*, cakārādi 101).
 lākṣāditailla (*Bhāratabhaiṣajyaratnākara*, Nr. 6287).

laṣunādyaghṛta (Bower MS II.223–225).
 lavangādyamodaka (*Bhaiṣajyaratnāvalī*, agnimāndyādi 245–250;
Bhāratabhaiṣajyaratnākara, Nr. 6354; *Sahasrayoga* 217–218).
 madhyamadaśamūlataila (*Bhaiṣajyaratnāvalī*, śīroroga 90–93; *Dhanvantari*, śīroroga 23).
 mahābhallātakarasaṣyana (*Vaidyacintāmaṇi* 460–461).
 mahācificādilehya (*Vaidyacintāmaṇi* 240–241).
 mahādāḍimādyaghṛta (*Bhaiṣajyaratnāvalī*, prameha 217–222;
Bhāratabhaiṣajyaratnākara, Nr. 5238).
 mahākalkarasa (*Napūṃsakāmṛtārṇava* 9.39–50).
 mahākūṣmāṇḍakasarpis (*Sahasrayoga* 58).
 mahālakṣāditaila (*Dhanvantari*, jvara 126; *Rasaratnādīpikā* 97–98).
 mahālavangādyacūrṇa (*Bhaiṣajyaratnāvalī*, grahaṇī 75–82).
 mahāparaṅgādirasāyana (*Vaidyacintāmaṇi* 297).
 mahāsugandhitaila (*Bhāratabhaiṣajyaratnākara*, Nr. 5307; *Napūṃsakāmṛtārṇava* 2.70–72; *Siddhayoga* 70.31–33; *Yogarātnākara* 919).
 māhiśākhyaguggulu (*Bhāratabhaiṣajyaratnākara*, Nr. 5186).
 mārtāṇḍarasa (Cat. Madras Nr. 13190: *Ratnākaraśādhayogagrantha*).
 mātuluṅgaḡuṭikā (Bower MS II.75–77 and 85–86).
 nāgabālātaila (*Vaidyacintāmaṇi* 377).
 nārikelāmṛta (*Bhaiṣajyaratnāvalī*, śūla 242–251; *Bhāratabhaiṣajyaratnākara*, Nr. 3472; *Dhanvantari*, śūla 37; *Rasaratnākara* II, amlapitta 68–79; *Vaṅgasena*, amlapitta 66–77).
 nimbapāṇicāṅgarasāyana (Ananta's *Yogarātnasamuccaya* 30.124–127).
 pāṇḍurogāntakarasa (*Rasayogasāgara*, pakārādi 105).
 pāraṅgyādirasāyana (*Rasayogasāgara*, pakārādi 121).
 phalaghṛta (Anantakumāra's *Yogarātnasamuccaya* 21.23–29; *Basavarājīya* 250; *Gadanigraha* I, ghṛta 142–149; *Rasaratnākara* II, yonivyādhi 9–16; *Yogarātnākara* 848).
 phalakalyāṇaghṛta (*Bhaiṣajyaratnāvalī*, yonivyāpad 78–84).
 pippalīvardhamānakalpa (Bower MS II.716–737).
 pippalyādirasāyana (*Sahasrayoga* 209).
 pippalyādyavaleha (*Gadanigraha* I, leha 300–305).
 piyūṣavallīrasa (*Bhaiṣajyaratnāvalī*, grahaṇī 334–345; *Bṛhadrasarājasundara* 347–348).
 pramehagajasimha (*Rasaratnādīpikā* 327–328).
 punarnavāguggulu (HIM I, 149 and 167).
 rājaraśyana (Vaṅgasena, nāsāroga 35–39).
 rasādicūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 6107; *Rasayogasāgara*, yakārādi 125; *Ṭoḍara* V: 5.49–50; *Vaidyacintāmaṇi* 429; *Yogarātnākara*, 399).
 a rasāyana (Nīścala ad *Cakradatta*, nāsāroga 29–31: two formulae, from Candrāṭa and the *Nāvanītakasamhitā*).
 rasāyanārīṣṭa (*Gadanigraha* I, āsava 304–311).
 śailūṣādirasāyana (*Vaidyacintāmaṇi* 296).

samaśarkaraguggulu (*Bhāvaprakāśa*, cikitsā 29.170–176; *Rasaratnākara* II, kuṣṭha 264–268).
 śaṅkhaṣpādyaghṛta (*Gadanigraha* I, ghṛta 135, add.).
 sarveśvaracūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 8192; *Rasayogasāgara*, śakārādi 351).
 śatāvarīghṛta (*Bhāratabhaiṣajyaratnākara*, Nr. 7360; *Gadanigraha* I, ghṛta 130–135).
 śatāvarīśarpis (Anantakumāra's *Yogarātnasamuccaya* 30.151–169).
 saubhāgyaśuṇṭhīpāka (*Bhāratabhaiṣajyaratnākara*, Nr. 8302; *Pākapradīpa* 214–228).
 sindūrādyataila (*Bhāratabhaiṣajyaratnākara*, Nr. 7990).
 śrīgopālataila (*Bhaiṣajyaratnāvalī*, vātavyādhi 289–300; *Bhāratabhaiṣajyaratnākara*, Nr. 7426; *Bheṣajasaṃhitā* 12, Nr. 71).
 svalpakadalīkhaṇḍaghṛta (HIM I, 150 and 176: from the *Samkṣiptasāra*).
 tṛṣṇāhararasa (*Rasakāmadhenu* IV.3.7–8).
 uttamāgnīkumārarasa (*Vaidyacintāmaṇi* 69).
 vajrahārītakī (Anantakumāra's *Yogarātnasamuccaya* 13.103–124).
 vāntāntakarasa (*Basavarājīya* 98; *Rasayogasāgara*, yakārādi 476; *Vaidyacintāmaṇi* 194–195).
 viṣaharaghṛta (Bower MS II.251–257).
 vyāghṛtāila (*Vaidyacintāmaṇi* 209).

ĀTREYASŪRI

sudhāpippalīyoga (*Rasayogasāgara*, śakārādi 419).

AVALOKITEŚVARA⁴

BAHUĠHĀTIYOGINĪ

vṛkodaragūṭikā (*Rasaratnasamuccaya* 21.130–132; *Rasayogasāgara*, yakārādi 584).

BHAGAVANT

mahākumārītāila (*Vaidyacintāmaṇi* 238).

BHAIKAVA

ardhanārīṇaṭeśvararasa (*Rasayogasāgara*, akārādi 237).
 ardhannārīśvararasa (*Bhāratabhaiṣajyaratnākara*, Nr. 8911; *Rasakāmadhenu* IV.1.233–236).
 bhairavarasa (*Bhaiṣajyaratnāvalī*, upadamaśa 32–48; *Rasayogasāgara*, pakārādi 454; *Rasendrasārasaṃgraha*, upadamaśa 5–21).
 bhairavarasāyana (*Rasakāmadhenu* IV.1.264–265).
 candrānanarasa (*Bṛhadrasarājasundara* 507; *Rasendracintāmaṇi* 183; *Rasendrasārasaṃgraha*, kuṣṭha 13–14).
 cintāmaṇīrasa (*Bhaiṣajyaratnāvalī*, jvara 691–695; *Bṛhadrasarājasundara* 285; *Dhanvantari*, jvara 135; *Rasayogasāgara*, cakārādi 109; *Rasendrasārasaṃgraha*, jvara 76–79).

jvarabhairavacūrṇa (*Basavarājīya* 43; *Bhaiṣajyaratnāvalī*, jvara 455–466; *Bhāratabhaiṣajyaratnākara*, Nr. 2142; *Rasayogasāgara*, cakārādi 216).
 a dhūma (*Dhanvantari*, upadamsa 18).
 jvarāṅkuśarasa (*Bṛhadrasarājasundara* 255).
 mahābhairavarasa (*Vaidyacintāmaṇi* 66).
 mustakādimodaka (*Bhaiṣajyaratnāvalī*, grahaṇī 185–190; *Bhāratabhaiṣajyaratnākara*, Nr. 5181).
 pārādādidhūpa (*Bhāratabhaiṣajyaratnākara*, Nr. 4385; *Rasayogasāgara*, pakārādi 126).
 rasacūḍāmaṇi (Tōḍara III: 4.249–256).
 śaṅkhadrāvarasa (*Rasayogasāgara*, śakārādi 20).
 sarveśvararasa (*Bhāratabhaiṣajyaratnākara*, Nr. 8195; *Bṛhadrasarājasundara* 252; *Rasayogasāgara*, śakārādi 359).
 sūcikābharaṇarasa (*Dhanvantari*, jvara 100; *Rasendrasārasaṃgraha*, jvara 145–146).
 svacchandabhairavarasa (*Vaidyacintāmaṇi* 194).
 vātānāśanarasa (*Rasaprakāśasudhākara* 8.118–120).

BHĀIRAVANĀTHA

pañcāmṛtaparpati (*Bṛhadrasarājasundara* 407–408; *Rasaratnasamuccaya* 14.77–97).

BHĀNU

parahitarasa (*Rasaratnasamuccaya* 20.83–88).

BHĀNUDĀSA

kuṭajaleha (*Bhāratabhaiṣajyaratnākara*, Nr. 791; *Dhanvantari*, atisāra 27).
 kuṭajāṣṭaka (*Dhanvantari*, atisāra 28).

BHAVA

jvarakālaketurasa (*Bhaiṣajyaratnāvalī*, jvara 1031–1032; *Bṛhadrasarājasundara* 308; *Rasayogasāgara*, cakārādi 196).

BHŪTEŚVARA

bhūteśvararasa (*Rasayogasāgara*, pakārādi 448; *Vaidyacintāmaṇi* 39).

BODHISATTVA⁵

siṃhyamṛtaghṛta (*Bhaiṣajyaratnāvalī*, arśas 192–193; *Cakradatta*, arśas 105–106; Tōḍara IV: 3.172–173).

BRAHMĀ⁶

recipe without a name (Anantakumāra's *Yogaratnasamuccaya* 16.150–159; *Dhanvantari*, viṣa 41).

amṛtasamjīvanarasāyana (*Rasayogasāgara*, akārādi 187).

bhāskarādyaghṛta (*Bhāratabhaiṣajyaratnākara*, Nr. 4877; Vaṅgasena, netraroga 411–414).

bhāskaraghṛta (Tōḍara VII: 16.325–330).
 bhūnimbādyacūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 4839).
 bṛhadagnimukhacūrṇa (*Bṛhannighaṇṭurātṇākara* V, 18: ajīṛṇa; *Gadanigraha* I, cūrṇa 128–139).
 bṛhaddhānvantaraghṛta (*Bhāratabhaiṣajyaratnākara*, Nr. 6763).
 bṛhatsārasvatacūrṇa (*Gadanigraha* I, cūrṇa 155–158).
 candraprabhāguṭikā (*Gadanigraha* I, guṭikā 188–191).
 caturmukharasa (*Bheṣajasamhitā* 1, Nr. 106; *Yogaratnākara* 328).
 daśāṅgadhūpa (*Bhāratabhaiṣajyaratnākara*, Nr. 3160; Vaṅgasena, viṣa 121–125).
 daśasārasarpis (Cat. Madras Nr. 13220: *Vaidyakagrantha*).
 hīṅgulākhyarasa (*Rasaratnadīpikā* 60).
 hutāśanarasa (*Yogaratnākara* 282–283).
 kalyāṇarasa (*Rasayogasāgara*, kakārādi 116; *Vaidyacintāmaṇi* 41).
 karṇāmṛtataila (*Rasasamketakalikā* 5.35–37).
 lauhāmṛta (*Bhaiṣajyaratnāvalī*, śūla 163–168).
 lohāmṛta (*Rasayogasāgara*, yakārādi 316).
 mācīkāśava (*Bhāratabhaiṣajyaratnākara*, Nr. 5337; *Gadanigraha* I, āśava 142–146ab).
 mahārāśnādikvātha (*Bheṣajasamhitā* 14, Nr. 89; *Sahasrayoga* 33–34; *Śārngadharasamhitā* II.2.88–94; *Yogaratnākara* 451).
 mṛtasamjīvanāgada (*Bhāratabhaiṣajyaratnākara*, Nr. 5716; *Cakradatta*, viṣa 32–38; Ca.Ci.23.54–60).
 nakhaparīkṣā (Tōḍara II: 6.109–110).
 nīlakaṇṭharasa (*Bhaiṣajyaratnāvalī*, rasāyana 61–65; *Bṛhadrasarājasundara* 542; *Rasendrasārasaṃgraha*, rasāyana 86–90; *Sahasrayoga* 239).
 pañcasneha (*Sahasrayoga* 104).
 pāṣāṇābhedaṇḍa (*Pākapradīpa* 336–344: given to Cyavana).
 pippalyādirasāyana (*Vaidyacintāmaṇi* 96).
 a rasāyana (A.h.U.39.15–23).
 sarvāṅgasundararasa (*Bhāratabhaiṣajyaratnākara*, Nr. 8182).
 somarājighṛta (*Bhaiṣajyaratnāvalī*, kuṣṭha 250–256; *Bhāratabhaiṣajyaratnākara*, Nr. 7965).
 sudarśanacūrṇa (Tōḍara III: 4.1194–1203).
 sūryaprabhā guṭikā (*Vaidyacintāmaṇi* 103; *Yogaratnākara* 323).
 sūryavaṇī (*Rasayogasāgara*, śakārādi 538).
 sūtikāghnarasa (*Bhaiṣajyaratnāvalī*, sūtikāroga 70–71; *Bhāratabhaiṣajyaratnākara*, Nr. 8265; *Rasayogasāgara*, śakārādi 513; *Rasendrasārasaṃgraha*, sūtikā 10–11).
 vātakulāntakarasa (*Bhaiṣajyaratnāvalī*, apasmāra 26–30; *Bhāratabhaiṣajyaratnākara*, Nr. 6981; *Bṛhadrasarājasundara* 448; *Dhanvantari*, apasmāra 21; *Rasayogasāgara*, yakārādi 449; *Rasendrasārasaṃgraha*, apasmāra 9–12).
 vijayabhairavarasa (*Basavarājīya* 143; *Bhaiṣajyaratnāvalī*, kāsa 80–83; *Vaidyacintāmaṇi* 199, 257).
 vijayaguṭikā (*Basavarājīya* 305).
 vijayānandarasa (*Bṛhadrasarājasundara* 520; *Rasendrasārasaṃgraha*, kuṣṭha 109–113).

BRAHMAJYOTIS

vardhamānarasa (*Rasaratnasamuccaya* 22.30–40).

BRAHMASUTA

kāmeśvaramodaka (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 180–185; *Ṭoḍara IV*: 2.164–168).

BUDDHA⁷

BUDDHAMUNI

khageśvararasa (*Rasaratnasamuccaya* 20.100–103; *Rasayogasāgara*, kakārādi 356).

BUDDHINĀTHA

pramadebhāṅkuśarasa (*Bṛhadyogatarāṅgiṇī* 147.278–297).

CAKRAPĀṆI

śaṅkhaṇḍirasa (*Sahasrayoga* 241–242).

CAMPAKĀRANYAVĀSINAH⁸

jayasundararasa (*Rasaratnasamuccaya* 22.5–14; *Rasayogasāgara*, cakārādi 164).

CANDRA⁹

candrāvaleha (*Rasaratnasamuccaya* 21.172–176).

kṣudrāharitakīlehya (*Vaidyacintāmaṇi* 98–99).

mahādrākṣādicūrṇa (*Rasayogasāgara*, takārādi 326).

CANDRANĀTHA

agnigarbhavaṭī (*Rasayogasāgara*, akārādi 61).

āmagaḥajasiṃhamodaka (*Bhaiṣajyaratnāvalī*, āmavāta 127–134).

āmavātagajendramodaka (*Rasaratnadīpikā* 302–303).

bhāskararasa (*Bhaiṣajyaratnāvalī*, agnimāndyādi 128–131;

Bhāratabhaiṣajyaratnākara, Nr. 4948).

candrāmṛtalauha (*Bhaiṣajyaratnāvalī*, kāsa 121–126; *Bhāratabhaiṣajyaratnākara*, Nr. 1902; *Bṛhadrasarājasundara* 420–421; *Rasendrasārasaṃgraha*, kāsa 75–80).

candrāmṛtaloha (*Dhanvantari*, kāsa 26; *Rasayogasāgara*, cakārādi 69).

candrāmṛtaparpati (*Bṛhadrasarājasundara* 414).

candrāmṛtarasa (*Basavarājīya* 144–145; *Bhaiṣajyaratnāvalī*, kāsa 62–70;

Rasayogasāgara, cakārādi 68; *Vaidyacintāmaṇi* 257).

candrāmṛtavaṭī (*Bhṛhasaṃhitā* 1, Nr. 113; *Rasayogasāgara*, cakārādi 70).

kuṣṭhaśailendrarasa (*Rasaratnākara II*, kuṣṭha 217–226).

sarvajvaraharalauha (*Rasayogasāgara*, śakārādi 308; *Rasendrasārasaṃgraha*, jvara 233–239).

śiraḥśūlādivajrarasa (D. Suresh Kumar, 1990: 100: from *Dhanvantari*).

śirovajarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 7589; *Rasayogasāgara*, śakārādi 80; *Rasendrasārasaṃgraha*, śīroroga 6–10).

śrīcandrāmṛtaloha (D. Suresh Kumar, 1990: 100: from *Dhanvantari*).

śukramātrkā vaṭī (*Bhaiṣajyaratnāvalī*, prameha 73–78).

śūlavajriṇī guṭikā (*Dhanvantari*, śūla 42; *Rasaratnākara II*, śūla 77–85).

śūlavajriṇī vaṭī (*Bhaiṣajyaratnāvalī*, śūla 99–104; *Dhanvantari*, śūla 42).

śūlavajriṇī vaṭikā (*Bhāratabhaiṣajyaratnākara*, Nr. 7661).

CANDRAŚIKHARA

muktārājamrgāṅkarasa (*Rasapaddhati* 199).

CATURMUKHA

caturmukharasa (*Bhaiṣajyaratnāvalī*, vātavyādhi 149–155; *Bṛhadrasarājasundara* 451; *Dhanvantari*, vātavyādhi 101; *Rasayogasāgara*, cakārādi 28; *Rasendracintāmaṇi* 95; *Rasendrasārasaṃgraha*, vātavyādhi 38–44).

DAṆḌAPĀṆI

siṃhanādaguggulu (*Bhaiṣajyaratnāvalī*, āmavāta 190–195;

Bhāratabhaiṣajyaratnākara, Nr. 7923; *Bhāvaprakāśa*, cikitsā 29.222–228 and 237–246; *Ṭoḍara V*: 14.61–67; *Vaidyacintāmaṇi* 387).

DASRAS¹⁰

dāḍimādyaghrta (*Bṛhadyogatarāṅgiṇī* 103.87–90).

kapikacchūpāka (*Bhāratabhaiṣajyaratnākara*, Nr. 9310; *Bṛhadyogatarāṅgiṇī* 147.146–152).

lakṣmaṇāluha (*Bhaiṣajyaratnāvalī*, pradara 84–86).

lakṣmaṇāloha (*Rasayogasāgara*, yakārādi 223).

lakṣmaṇātaila (*Bhāratabhaiṣajyaratnākara*, Nr. 6330).

mahākalka (*Rasaratnasamuccaya* 27.128–144).

mahāsugandhitaila (*Bṛhadyogatarāṅgiṇī* 147.381–383).

vāsākūṣmāṇḍaleha (*Rasakāmadhenu IV*.9.47–48).

DEVADEVA

bastyāmayāntaka (Anantakumāra's *Yogaratanasamuccaya* 15.84–95ab).

bṛhadvāsavāleha (*Bhāratabhaiṣajyaratnākara*, Nr. 7012).

citrakādicūrṇa (*Bhāratabhaiṣajyaratnākara*, Nr. 1725; *Rasayogasāgara*, cakārādi 102).

kusumbhādyataila (*Gadaniḥgraha I*, taila 170–174).

madanānandamodaka (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 242–266;

Bhāratabhaiṣajyaratnākara, Nr. 5498; *Bhṛhasaṃhitā* 6, Nr. 77).

sarveśvaracūrṇa (*Rasaratnākara II*, śūla 24–32).

DEVADEVAMUNI

tālakeśvararasa (*Rasakāmadhenu IV*.40.438–441).

DEVARĀJA

pañcānanarasa (*Rasaratnasamuccaya* 19.54–64).

DEVENDRA

vārāhyādighṛta (*Sahasrayoga* 45).

DEVĪ

agnikumāraraśa (*Rasaratnasamuccaya* 18.178–195).

bṛhatsārasvataghṛta (*Rasaratnadīpikā* 276).

DHARMAPĀLA

tāmrarasāyana (*Bhāratabhaiṣajyaratnākara*, Nr. 2597; *Rasayogasāgara*, takārādi 48; Vaṅgasena, rasāyana 69–92).

GARUḌA

agnimukharasa (*Rasakāmadhenu* IV.22.43–47).

GIRIJATANAYĀVALLABHA (compare Giritanayāvallabha)

mahārāśnādikvātha (*Bhāratabhaiṣajyaratnākara*, Nr. 5885).

GIRIRĀJAPUTRĪ

pratāpalañkeśvararaśa (Vaṅgasena, strīroga 299–301).

śītajvarāṇyaḥkṛṣṇānumegha (*Rasayogasāgara*, śakārādi 115).

GIRĪŚA

bṛhacchivaguṭikā (*Gadanigraha* I, guṭikā 216–238; Vaṅgasena, vātarakta 191–212).

candrodayarasa (*Rasendracintāmaṇi* 69–70).

mṛtyuñjayarasa (*Bṛhadyogatarangīnī* 147.263–264; *Rasayogasāgara*, pakārādi 681).

rasaśārdūla (*HIM* I, 40 and 59–60).

a rasāyana (*Rasendracūḍāmaṇi* 14.114).

GIRITANAYĀVALLABHA (compare Giritanayāvallabha)

mahārāśnādikaśāya (*Vaidyacintāmaṇi* 187).

mahārāśnādikvātha (*Yogaratanākara* 450).

rāśnādikvātha (*Sahasrayoga* 34).

GOPĀLADĀSA

kuṭajaleha (*Bhāratabhaiṣajyaratnākara*, Nr. 791).

HARA

kalyāṇasundarābhra (*Rasayogasāgara*, kakārādi 117).

kuṣṭhahararaśa (*Rasayogasāgara*, kakārādi 300).

śītabhañjanarasa (*Rasayogasāgara*, śakārādi 121; *Vaidyacintāmaṇi* 43).

śūlarājalaḥ (*Bhaiṣajyaratnāvalī*, śūla 132–136; *Bhāratabhaiṣajyaratnākara*, Nr.

7660; *Rasendrasārasaṃgraha*, śūla 24–28).

śūlarājaloḥ (*Dhanvantari*, śūla 52).

vijayarpaṭī (*Bhaiṣajyaratnāvalī*, grahaṇī 485–491).

HARAPĀDA

pramehagajakesarīraśa (*Rasayogasāgara*, pakārādi 265).

HARI

drutisāraraśa (*Rasaratnasamuccaya* 22.41–46).

himapānaka (*Siddhaprayogalatikā* 28.11–13).

kālakandhararasa (*Rasayogasāgara*, kakārādi 211; *Vaidyacintāmaṇi* 40).

HARIPĀDA

mehagajakesarīraśa (*Vaidyacintāmaṇi* 295).

HASTIN

śuṇṭhīpāka (*Rasayogasāgara*, śakārādi 149).

INDRA¹¹

daśamūlyādyataila (*Gadanigraha* I, taila 412–421: given by Surendra to Nanda in order to protect Bālakṛṣṇa).

INDRAMUNI

śleṣmaśailendrarasa (*Bṛhadrasarājasundara* 313).

INDUŚEKHARA

induśekhhararasa (*Bhaiṣajyaratnāvalī*, garbhiṇīroga 94–98; *Rasayogasāgara*, akārādi 349).

ĪŚA

śivāmodaka (*Bhaiṣajyaratnāvalī*, bālaroga 105–111).

vetālarasa (*Bhaiṣajyaratnāvalī*, jvara 605–612).

ĪŚĀNA

āmavātārivaṭikā (*Rasendrasārasaṃgraha*, āmavāta 1–6).

ĪŚVARA

haragaurīraśa (Harṣakīrti's *Yogacintāmaṇi* 239–240).

kālāgnirudrarasa (*Rasayogasāgara*, kakārādi 234; *Vaidyacintāmaṇi* 67).

kālakūtarasa (*Basavarājīya* 61–62).

rājayoga (*Bhāratabhaiṣajyaratnākara*, Nr. 5928; *Gadanigraha* I, cūrṇa 377–384ab).

śītanāgāṇkuśarasa (*Sahasrayoga* 235).

sūryapāvakarasa (*Rasayogasāgara*, śakārādi 530; *Vaidyacintāmaṇi* 43).

JANAKESVARA

samasaktukaghṛta (Bower MS II.454–459).

KACA

nalāmūlādi (*Cakradatta*, mūtrāghāta 10).

KĀLĀGNIRUDRA

rudrataila (*Bhaiṣajyaratnāvalī*, śīroroga 126–133; *Dhanvantari*, śīroroga 26).

KĀLAKAṆṬHA

kālakaṇṭharasa (*Vaidyacintāmaṇi* 197).

KĀLANĀTHA

kāleśvararasa (*Rasayogasāgara*, kakārādi 247).

mahākāleśvararasa (*Bhaiṣajyaratnāvalī*, kāsa 74–79; *Bhāratabhaiṣajyaratnākara*, Nr. 5537).

KĀLĀPĀDA

bṛhatsvāyambhuvaguggulu (*Gadanigraha* I, guṭikā 365–371).

KĀMADEVA¹²

aśvagandhārasāyana (*Vaidyacintāmaṇi* 97).

kāmadevaghṛta (*HIM* II, 293–295).

methimodaka (*Bhaiṣajyaratnāvalī*, grahaṇī 171–177; *Bhāratabhaiṣajyaratnākara*, Nr. 5184).

śrīmadānandamodaka (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 242–266).

KAMALĀ

nārāyaṇarasa (*Vaidyacintāmaṇi* 38).

KAMALĀKARA

vamanāmṛtayoga (*Bhāratabhaiṣajyaratnākara*, Nr. 6966; *Bṛhadrasarājasundara* 441; *Vaidyacintāmaṇi* 680).

KĀŚIKA

mañjiṣṭhādyāgada (*Bhāratabhaiṣajyaratnākara*, Nr. 5684; *Vaṅgasena*, viśa 137).

KATHAṆḌINĀTHA

a recipe (*Ṭoḍara* III: 4.407).

KESARIN

kākolyādighṛta (*Rasaratnākara* II, vātarakta 91–95).

pañcānanarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 4278; *Rasaratnākara* II, āmavāta 50–60).

KUMĀRAKAS¹³

romavedharasa (*Bhāratabhaiṣajyaratnākara*, Nr. 6159).

LĀĪ

bṛhallāicūrṇa (*Bṛhadrasarājasundara* 332–333).

lāicūrṇa (*Rasakāmadhenu* IV.14.141–143; *Rasayogasāgara*, yakārādi 249).

LĀIKĀ

lāicūrṇa (*Ṭoḍara* IV: 2.128–134).

LALITANĀTHA

lalitanātharasa (*Rasakāmadhenu* IV.7.7–16; *Rasayogasāgara*, yakārādi 214).

LOKANĀTHA

ḍṣṭaphalāpanīyavaṭikā (*Bṛhadrasarājasundara* 276–277).

jvaramātaṅgakesarirasa (*Bhaiṣajyaratnāvalī*, jvara 875–880; *Bṛhadrasarājasundara* 296; *Rasayogasāgara*, cakārādi 223).

lokanātharasa (*Rasakāmadhenu* IV.1.425–434).

pānīyavaṭikā (*Bhaiṣajyaratnāvalī*, jvara 668–687; *Bhāratabhaiṣajyaratnākara*, Nr. 4332; *Rasayogasāgara*, pakārādi 118).

LOKASENA

sārasvatacūrṇa (*Gadanigraha* I, cūrṇa 151–154).

MĀDANAGOPĀLA

candrakāntarasa (*Rasayogasāgara*, cakārādi 47).

MĀDHUSŪDANA

bṛhacchāgalādighṛta (*Rasaratnādīpikā* 274–276).

MAHĀDEVA

bṛhadvāsāvaleha (*Bhaiṣajyaratnāvalī*, rājayakṣman 46–52).

candanādicūrṇa (*Ṭoḍara* IV: 7.60–67).

dadhikāsavidhūnanarasa (*Basavarājīya* 146).

hemagarbhapoṭṭalīrasa (*Ṭoḍara* III: 4.1134–1143).

lakṣmīvilāsarasa (*Bhaiṣajyaratnāvalī*, kāsa 130–137).

mahābhallātaka (*Ṭoḍara* VII: 5.251–264).

mahābhallātakaguḍa (*Bhaiṣajyaratnāvalī*, kuṣṭha 207–221; *Dhanvantari*, kuṣṭha 44).

mahābhallātakāvaleha (*Bhāvaprakāśa*, cikitsā 54.84–94; *Pākapradīpa* 469–482).

mahākālāgnirudrarasa (*Rasayogasāgara*, kakārādi 233; *Vaidyacintāmaṇi* 70).

mahākāleśvararasa (*Rasakāmadhenu* IV.1.316–321).

mahākāleśvaramodaka (*Bhaiṣajyaratnāvalī*, vājīkaraṇa 225–241; *Dhanvantari*, vājīkaraṇa 13; *Rasaratnākara* II, vājīkaraṇa 93–101; *Rasayogasāgara*, kakārādi 195).

mārkaṇḍeyacūrṇa (*Bhaiṣajyaratnāvalī*, grahaṇī 113–117; *Rasayogasāgara*, pakārādi 571).

pānīyabhaktavaṭikā (*Rasaratnādīpikā* 169).

sahadevīprayoga (*Rasaratnasamuccaya* 24.142).
 sūcikābharaṇarasa (*Rasayogasāgara*, śakārādi 473).
 sūtabhasmaprayoga (*Bṛhadrasarājasundara* 447; *Dhanvantari*, apasmāra 19;
Rasayogasāgara, śakārādi 481; *Rasendrasārasaṃgraha*, apasmāra 4).
 taptarājataila (*Dhanvantari*, śiroroga 27).
 vijayādivatī (*Bhaiṣajyaratnāvalī*, yonivyāpad 65–67).
 yogeśvararasa (*Bhaiṣajyaratnāvalī*, prameha 111–115; *Rasendrasārasaṃgraha*,
 prameha 51–55).
 recipe without a name (*Kāmaratna* 13.65–66).

MAHĀGURU

mahāpramehāntakarasa (*Rasayogasāgara*, pakārādi 293).

MAHEŚA

bṛhadagnikumārarasa (*Bhaiṣajyaratnāvalī*, agnimāndyādi 117–122;
Rasendrasārasaṃgraha, ajīrṇa 16–20).
 candanāsava (*Bhāratabhaiṣajyaratnākara*, Nr. 1812).
 caturbhujarasa (*Bhaiṣajyaratnāvalī*, unmāda 52–57; *Bhāratabhaiṣajyaratnākara*, Nr.
 1879; *Dhanvantari*, unmāda 37; *Rasayogasāgara*, cakārādi 26;
Rasendrasārasaṃgraha, unmāda 20–26).
 jyotiṣmān rasaḥ (*Bhaiṣajyaratnāvalī*, kuṣṭha 178–185; *Rasayogasāgara*, pariśiṣṭa 58).
 kālakūṭarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 9499; *Rasayogasāgara*, kakārādi 213).
 kṛmidrumakuṭhārarasa (*Rasakāmadhenu* IV.20.5–7; *Rasayogasāgara*, kakārādi 329).
 mahāmṛtyuñjayarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 5559; *Bṛhadrasarājasundara*
 501; *Rasendrasārasaṃgraha*, plīharoga 60–64).
 manmathābhrarasa (*Rasayogasāgara*, pakārādi 532).
 rājyavallabharasa (*Bhāratabhaiṣajyaratnākara*, Nr. 6137; *Rasendrasārasaṃgraha*,
 grahaṇī 136–140).
 śrīmanmatharasa (*Bṛhadrasarājasundara* 536; *Rasendrasārasaṃgraha*, rasāyana 2–9).

MAHEŚVARA

mahārājanṛpativallabharasa (*Bhaiṣajyaratnāvalī*, grahaṇī 371–380;
Bhāratabhaiṣajyaratnākara, Nr. 5564; *Rasendrasārasaṃgraha*, grahaṇī 146–155).
 nṛpativallabharasa (*Rasayogasāgara*, takārādi 459).

MAKAREŚVARA

rasālā (HIM I, 40 and 68: from *Bhāvaprakāśa*).

MAÑIBHADRA¹⁴

māñibhadraguḍa (*Sahasrayoga* 178).
 māñibhadramodaka (HIM III, 746 and 747–748: *Cakradatta*, *Śataśloki*, *Siddhayoga*;
 compare A.h.Ci.19.31–32).
 māñibhadrataila (Bower MS III.10–14).
 māñibhadravatāka (*Gadanigraha* I, guṭikā 65–66: bestowed to Śākyabhikṣu).

viḍaṅgasārādyā guṭikā (HIM III, 746 and 748: from *Gadanigraha*; compare
 A.h.Ci.19.31–32).

MAÑJUNĀTHA

ardhanārīṇaṭeśvararasa (*Rasayogasāgara*, akārādi 233).

MAÑJUŚRĪ¹⁵

MATHANABHIṢAJ

trayastrīṣaṭkvātha (*Gadanigraha*, kāya, jvara 480–481).

MATSYENDRA

rāmabāṇarasa (*Rasayogasāgara*, yakārādi 173).

MĀTULA

uśabāvaleha (*Bhāratabhaiṣajyaratnākara*, Nr. 9116).

MRGACĀRIN

rājāmṛgāṅkarasa (*Rasaratnasamuccaya* 17.92–99).

MRTYUÑJAYA

ratnagarbhapoṭṭālī (Tōḍara III: 4.1144–1153).
 vasantatilakarasa (*Bṛhadrasarājasundara* 541; HIM I, 40 and 55; Vṛddhatrayī 331).

MŪLADEVA

kāmāgnisaṃdīpanamodaka (*Bṛhadrasarājasundara* 550; *Rasayogasāgara*, kakārādi
 183).

MUNI

bṛhajjivārāṅkuśarasa (*Bṛhadrasarājasundara* 318).

NAKULA

snāyvantakarasa (*Rasayogasāgara*, śakārādi 575).

NANDIN

agnikumārarasa (*Rasaratnasamuccaya* 18.178–195; *Rasayogasāgara*, akārādi 49).
 amṛtārṇavarasa (*Rasaratnasamuccaya* 27.75–83; *Rasayogasāgara*, akārādi 199).
 grahaṇīgajakesarīrasa (*Rasaratnasamuccaya* 16.73–83; *Rasayogasāgara*, kakārādi
 538).
 medinīsārarasa (*Rasaratnasamuccaya* 20.117–123; *Rasayogasāgara*, pakārādi 714).
 mehararasa (*Rasaratnasamuccaya* 17.100–107).
 pramehararasa (*Rasayogasāgara*, pakārādi 290).
 sarveśvaraparpatī (*Rasaratnasamuccaya* 18.2–16).
 vātārājavatī (*Bhāratabhaiṣajyaratnākara* Nr. 6994; *Bṛhadrasarājasundara* 457).

vātavīdhvaṃsanarasa (*Bhāratabhaiṣajyaratnākara* Nr. 700; *Rasaratnasamuccaya* 21.118–129).

NANDINĀTHA

mahāmrgāṅkarasa (*Rasendrasārasaṃgraha*, yakṣman 80–87).
vātavīdhvaṃsanarasa (*Bhaiṣajyaratnāvalī*, vātavādhi 182–189;
Bhāratabhaiṣajyaratnākara, Nr. 7000; *Rasayogasāgara*, yakārādi 471;
Rasendrasārasaṃgraha, vātavādhi 59–65).

NANDĪŚVARA

mahodayapratyayasārara (*Bhāratabhaiṣajyaratnākara*, Nr. 5593;
Rasaratnasamuccaya 15.41–49).

NĀRĀYAṆA

candanāditaila (*Vaidyacintāmaṇi* 299).
mahānārāyaṇataila (*Bhaiṣajyaratnāvalī*, vātavādhi 343–354).
nārācarasa (*Vaidyacintāmaṇi* 237).
nārāyaṇacūrṇa (*Bhaiṣajyaratnāvalī*, atisāra 103–106; *Bhāratabhaiṣajyaratnākara*, Nr. 3436; *Dhanvantari*, atisāra 25).
śatāvarīnārāyaṇataila (*Bṛhadyogatarāṅgiṇī* 90.220–231; *Vaidyacintāmaṇi* 207;
Yogarātākara 458).
śatāvarīrasāyana (*Vaidyacintāmaṇi* 243).
siddhārthataila (Bower MS III.36–53).

NĀSATYAS¹⁶

māṇikyatilakarasa (*Bhāratabhaiṣajyaratnākara*, Nr. 5597).

NĀTHA

śarkarāleha (*Rasaratnadīpikā* 335).

NĀYIKĀ

nāyikācūrṇa (*Dhanvantari*, grahaṇī 15).

NĪLAKAṆṬHA

rajaḥpravartinīvaṭī (*Bhaiṣajyaratnāvalī*, yonivyāpad 58–60).
śrīnīlakaṇṭharasa (*Bhaiṣajyaratnāvalī*, rasāyana 144–150).

NITYANĀTHA

bhṛṅgāmalakataila (*Vaidyacintāmaṇi* 240).
gulmavajriṇī vaṭī (*Bṛhadrasarājasundara* 477).
siṃhanādarasa (*Vaidyacintāmaṇi* 197).

NIVĀRAṆA

māṇibhadramodaka (*Ṭoḍara* IV: 3.105–106).

NRHARI, THE SON OF JAYADEVA
kuberākṣādicūrṇa (*Vaidyacintāmaṇi* 326).

PARVATARĀJAPUTRĪ

cintāmaṇirasa (*Vaidyacintāmaṇi* 87).

PĀRVATĪ

cintāmaṇirasa (*Bhāratabhaiṣajyaratnākara*, Nr. 1932; *Rasayogasāgara*, cakārādi 120;
Yogarātākara 335).
śāmbhavīrasa (*Rasayogasāgara*, śakārādi 75; *Vaidyacintāmaṇi* 40).

PĀRVATĪKĀNTA

sūcikābharaṇarasa (*Rasayogasāgara*, śakārādi 467).

PĀRVATĪPATI

vātavajrarasa (*Vaidyacintāmaṇi* 198).

PINĀKIN

kaulītikā vartih (*Gadanigraha*, śālākya, netraroga 272–275;
Bhāratabhaiṣajyaratnākara, Nr. 9452).
rājayakṣmaharasa (*Rasayogasāgara*, yakārādi 152).
śāmbhavīrasa (*Rasayogasāgara*, śakārādi 75).
svaṛṇasindūra (HIM I, 40 and 78–79: from the *Samkṣiptasāra*; Vṛddhatrayī 332).
vajrakṣāra (*Bhāratabhaiṣajyaratnākara*, Nr. 6588; *Rasaratnasamuccaya* 19.24–29;
Rasendrasārasaṃgraha, plīharoga 80–83; *Yogarātākara* 524).

PINGALĀYOGINĪ

nirguṇḍīkalpa (*Bhaiṣajyaratnāvalī*, rasāyana 54).

PRAJĀPATI¹⁷

mahārāśnādikvātha (*Bhaiṣajyaratnāvalī*, āmavāta 28–35; *Bhāvaprakāśa*, cikitsā
26.132–142).

PURANDARA

bhārṅgīharīṭakyavaleha (*Yogarātākara* 372).

PUREŚĀNA

āmavātārivaṭikā (*Bhāratabhaiṣajyaratnākara*, Nr. 398; *Dhanvantari*, āmavāta 28).

PŪRṆĀMRTĀKHYAYOGĪNDRA

jayasundararasa (*Rasaratnasamuccaya* 22.5–14).

RASARĀJA

rogatrayārīrasa (*Sahasrayoga* 237).

saubhāgyaśuṇṭhī (*Rasaratnasamuccaya* 22.116–120).
 sūcikābharaṇarasa (*Rasaratnasamuccaya* 12.70–89; *Rasayogasāgara*, śakārādi 472).
 sūryaprabhā guṭikā (*Vaidyacintāmaṇi* 190).
 sūryaprabhā vaṭī (*Bṛhadrasarājasundara* 455–456).
 trailokyatilakarasa (*Rasaratnasamuccaya* 15.66–80).
 trimūrtirasa (*Vaidyacintāmaṇi* 43).
 tripurāntakarasa (*Rasayogasāgara*, takārādi 210; *Vaidyacintāmaṇi* 39).
 upadaṁśagajakesarirasa (*Bṛhadyogatarāṅgiṇī* 117.27–31).
 upadaṁśebhasiṁharasa (*Bhāratabhaiṣajyaratnākara*, Nr. 536).
 vātāṅkuśarasa (*Vaidyacintāmaṇi* 193).
 vātaviṣphotahararasa (*Rasayogasāgara*, yakārādi 472).
 viṣamajvaraharalauha (*Rasaratnadīpikā* 90).
 viṣamārīrasa (*Rasayogasāgara*, yakārādi 562).
 viśvoddīpakābhra (*Bhaiṣajyaratnāvalī*, agnimāndyādi 221–224;
Bhāratabhaiṣajyaratnākara, Nr. 7071).
 vyoṣādyā guṭikā (*Gadanigraha* I, guṭikā 299–302).
 vyoṣādyaguṭikāguggulu (*Bhāratabhaiṣajyaratnākara*, Nr. 6696).

ŚAMBHUNĀTHA

rasakandarparasa (*Rasayogasāgara*, yakārādi 60).

ŚAMKARA

ajṛṇakāṇṭakarasa (*Rasakāmadhenu* IV.13.32–34).
 ardhānārīṇaśvararasa (*Bhāratabhaiṣajyaratnākara*, Nr. 332).
 daivavyapāśrayacikitsā (*Rasaratnasamuccaya* 22.60–69).
 kalpatarurasa (*Bhāratabhaiṣajyaratnākara*, Nr. 968; *Rasayogasāgara*, kakārādi 106).
 lakṣmīvilāsarasa (*Rasayogasāgara*, yakārādi 234; *Rasakāmadhenu* IV.1.715–721).
 mahāśatāvartītaila (*Vaidyacintāmaṇi* 239).
 mṛtasamjīvanarasa (*Rasendrasārasaṁgraha*, jvara 156–160).
 nityoditarasa (*Bṛhadrasarājasundara* 359; *Rasakāmadhenu* IV.48.65–67;
Rasendracintāmaṇi 125–126).
 pañcānanavaṭī (*Rasendrasārasaṁgraha*, arśas 28–30).
 pāradaḍruti (*Bhāratabhaiṣajyaratnākara*, Nr. 4334; *Rasakāmadhenu* IV.22.72–80).
 pāśupatāstrarasa (*Rasayogasāgara*, pakārādi 146; *Vaidyacintāmaṇi* 66).
 pittabhañjanarasa (*Vaidyacintāmaṇi* 234).
 pūrṇacandrarasa (*HIM* I, 40 and 79; from *Samkṣiptasāra*).
 rākṣasarasa (*Rasaratnasamuccaya* 16.147–148).
 śamkaralauha (*Bhāvaprakāśa*, cikitsā 5.96–98).
 śamkaraloha (*Vaṅgasena*, arśas 263–302).
 śamkaramataloha (*Rasakāmadhenu* IV.48.109–131).
 śamkaratāila (*Vṛddhatrayī* 331).
 śamkaravaṭī (*Bhaiṣajyaratnāvalī*, hṛdroga 52–56; *Bhāratabhaiṣajyaratnākara*, Nr. 7527; *Rasayogasāgara*, śakārādi 9).
 śamkarijvarāṅkuśarasa (*Bṛhadrasarājasundara* 299).

saṁśoṣaṇarasa (*Rasakaumudī* 4.118cd–124; *Rasayogasāgara*, śakārādi 565).
 śaṅkhadrāva (*Vaṅgasena*, udara 176–178).
 siddhaharītālabhasman (*Bheṣajasaṁhitā* 5, Nr. 65).
 śūlebhasiṁhīnīguṭikā (*Bhāratabhaiṣajyaratnākara*, Nr. 7667; *Rasakāmadhenu* IV.21.52–56; *Rasayogasāgara*, śakārādi 181).
 tālakeśvararasa (*Rasayogasāgara*, takārādi 129).
 vātāṅkuśarasa (*Vaidyacintāmaṇi* 193).

SAṂTOṢANĀTHA

saṁnipātābhairavarasa (*Rasakāmadhenu* IV.1.367–368).

ŚANMUKHA

śaṇmukharasa (*Rasakaumudī* 4.27–33ab).

SARASVATĪ¹⁸

brāhmīghṛta (*Sahasrayoga* 70).
 sārasvataghṛta (*Gadanigraha* I, ghṛta 136–141).

ŚAŚĪSEKHARA

lakṣmīvilāsarasa (*Rasayogasāgara*, yakārādi 242).

SIDDHA

nāgeśvararasa (*Rasayogasāgara*, takārādi 421).
 phaṇipatirasa (*Vaidyacintāmaṇi* 194).

SIDDHANĀTHA

lokanāyakarasa (*Rasakāmadhenu* IV.15.32–38).

SIMHAGUPTA

khadirādivaṭī (*Bhāratabhaiṣajyaratnākara*, Nr. 1069; *Gadanigraha* I, guṭikā 457–459;
Rasayogasāgara, kakārādi 360).

SIMHAṆA

siṁhaṇacūrṇa (*Gadanigraha* I, cūrṇa 394).

ŚIVA¹⁹

agnidīpanarasa (*Rasaratnadīpikā* 197).
 anaṅgamekhalāmodaka (*Bhāratabhaiṣajyaratnākara*, Nr. 107; *Bṛhadyogatarāṅgiṇī* 147.419–425).
 bālakumārarasa (*Rasaratnadīpikā* 418).
 bālarasa (*Bhaiṣajyaratnāvalī*, bālaroga 127–131; *Bṛhadrasarājasundara* 535;
Rasendrasārasaṁgraha, bālaroga 1–5).
 bālayakṛdariloha (*Bhāratabhaiṣajyaratnākara*, Nr. 4742; *Rasayogasāgara*, pakārādi 371).

bhūtabhairavarasa (Ṭoḍara III: 4.1001–1003).
 br̥haccūḍāmaṇirasa (*Bhāratabhaisajyaratnākara*, Nr. 1940; *Rasayogasāgara*, cakārādi 140; *Rasendrasārasaṃgraha*, jvara 360–365).
 br̥hajjvarabhairavataila (*Bhaisajyaratnāvalī*, jvara 1372–1378).
 br̥hatsarvajvaraharaloḥa (*Br̥hadrasarājasundara* 316).
 cūḍāmaṇirasa (*Bhaisajyaratnāvalī*, jvara 981–986 and 987–992;
Bhāratabhaisajyaratnākara, Nr. 1938; *Rasayogasāgara*, cakārādi 138;
Rasendrasārasaṃgraha, jvara 351–356).
 culukabhedarasa (Ṭoḍara VI: 12.135–141).
 grahaṇīkapāṭarasa (*Rasayogasāgara*, kakārādi 521).
 haridrādiyoga (*Yogarātnākara* 541).
 jayaṃgalarasa (*Bhaisajyaratnāvalī*, jvara 1061–1069; *Bhāratabhaisajyaratnākara*, Nr. 2103; *Br̥hadrasarājasundara* 309; *Dhanvantari*, jvara 109; *Rasayogasāgara*, cakārādi 158).
 jvarāṅkuśarasa (Ṭoḍara III: 4.956–962).
 kālārīrasa (Ṭoḍara VI: 12.142–144).
 lakṣmīnārāyaṇarasa (*Rasayogasāgara*, yakārādi 229).
 lokanātheśvararasa (Ṭoḍara IV: 8.157–159).
 mahādrāvaka (*Rasarātnadīpikā* 356–357).
 mahāgrahaṇīkapāṭarasa (*Rasendrasārasaṃgraha*, grahaṇī 95–97).
 makaradhvaḥja (*Rasendrasārasaṃgraha*, rasāyana 75–77).
 makaradhvajarasa (*Br̥hadrasarājasundara* 541; *Rasayogasāgara*, pakārādi 469).
 makaradhvajarasāyana (*Bhaisajyaratnāvalī*, rasāyana 75–77;
Bhāratabhaisajyaratnākara, Nr. 5467).
 mṛtyuñjayarasa (*Dhanvantari*, jvara 136).
 mūrchanṭakarasa (*Bhāratabhaisajyaratnākara*, Nr. 5624).
 nāgodarasa (Ṭoḍara III: 4.8–9).
 punarnavādītaila (*Vaidyācintāmaṇi* 433).
 rāmarasa (*Bhāratabhaisajyaratnākara*, Nr. 6150).
 rasabhasmayoga (*Yogarātnākara* 922–923).
 rasasindūra (*Rasayogasāgara*, yakārādi 117).
 rasendramaṅgalarasa (*Rasakāmadhenu* IV.40.84–95).
 recipes against pārśvaśūla (Ṭoḍara V: 11.786–789).
 sarvatobhadrarasa (*Bhaisajyaratnāvalī*, jvara 1126–1134; *Rasayogasāgara*, śakārādi 317; *Rasendrasārasaṃgraha*, jvara 331–339).
 saubhāgyaśuṇṭhī (*Pākapradīpa* 33–39).
 śivāgāda (A.s.U.40.87).
 śivāguṭikā (*Bhaisajyaratnāvalī*, rasāyana 151–175).
 śivātaila (*Rasarātnadīpikā* 268–269).
 śrīṅgaveravaṭī (*Rasarātnadīpikā* 43).
 śulbasundararasa (*Vaidyācintāmaṇi* 324).
 tālakeśvararasa (*Rasayogasāgara*, takārādi 96).
 trimūrtirasa (Ṭoḍara VI: 12.120–145).
 vajrakṣāra (Ṭoḍara VI: 12.72–77).

vāmanīyarasa (Ṭoḍara VI: 12.120–134).
 yogarāja (Ṭoḍara III: 4.1099–1102).

ŚIVĀ

śivātaila (*Bhaisajyaratnāvalī*, unmāda 93–100).

SOMADEVA

vātavisphoṭahararasa (*Rasayogasāgara*, yakārādi 472).

SOMANĀTHA

tāmraḥhasman (*Rasarātnasamuccaya* 5.58–61; *Rasendracūḍāmaṇi* 14.70).

SOMA YATI

kumudaprakāśa (*Rasayogasāgara*, kakārādi 278).

ŚRĪGIRIŚA

kāntarasāyana (*Rasayogasāgara*, kakārādi 142).

ŚRĪNĀTHA

tīkṣṇamukharasa (*Rasayogasāgara*, takārādi 167).

ŚRĪVATSĀNKA

rasaparpaṭī (*Br̥hadrasarājasundara* 337–338).
 rasaparpaṭikā (*Bhaisajyaratnāvalī*, grahaṇī 402–441).

SUKAVI

laśunapāka (*Rasayogasāgara*, yakārādi 220).

ŚUKRA

daśāṅgadhūpa (Candraṭa ad *Cikitsākalikā* 375).
 mṛtasamjīvanī surā (*Bhaisajyaratnāvalī*, vājīkaraṇa 372–386).

ŚŪLAPĀNĪ

kumāryāsava (*Bhāratabhaisajyaratnākara*, Nr. 894; *Gadanīgraha* I, āsava 1–15ab).
 dadhivaṭī (*Rasarātnadīpikā* 60–61).
 pūṇacandrodayasindūra (*Basavarājīya* 133; *Rasayogasāgara*, pakārādi 214).

SURENDRA

daśamūlyādyataila (*Gadanīgraha* I, taila 412–421).

SŪRYA²⁰

kṣudhāsāgararasa (*Bhaisajyaratnāvalī*, agnimāndyādi 100–101;
Bhāratabhaisajyaratnākara, Nr. 8753; *Dhanvantari*, agnimāndya 24).
 kṣudhāsāgaravaṭī (*Vaidyācintāmaṇi* 407).

sūryakrāntarasa (*Vaidyacintāmaṇi* 457).

SŪRYADĀSA

sarvadīpakaṇṇarasa (*Rasayogasāgara*, śakārādi 322).

SVASAMVEDYA

kanakasundararasa (*Rasayogasāgara*, kakārādi 27).

SVAYAMBHŪ

sahacarataila (Bower MS II.329–336).

saṃjīvanāgada (A.s.U.40.59–67).

svāyambhuvagugulu (*Gadanigraha* I, guṭikā 303–307ab; *Rasayogasāgara*, śakārādi 601).

vajrakṣāra (*Bhāvaprakāśa*, cikitsā 32.35–41).

TANTRANĀTHA

bhāskararasa (*Rasayogasāgara*, pakārādi 428).

TĀRĀ²¹

tārāmaṇḍūra (*Rasakāmadhenu* IV.21.162–164; *Rasaratnākara* II, pariṇāmasūla 28–33; *Rasayogasāgara*, takārādi 60; *Vaidyacintāmaṇi* 329).

tārāmaṇḍūraguḍa (*Bhaiṣajyaratnāvalī*, śūla 181–187; Vaṅgasena, pariṇāmasūla 63–68).

tārāmaṇḍūravāṭaka (*Bṛhadyogatarāṅgiṇī* 95.50–54ab).

vaḍavāmukhī guṭikā (*Rasaratnasamuccaya* 16.127–128).

TRAILOKYANĀTHA

siddhamakaradhvaṇa (*Bhaiṣajyaratnāvalī*, rasāyana 110–130).

TRINETRA

triguṇākhyarasa (*Vaidyacintāmaṇi* 194).

TRIPURĀ

tripurāntakarasa (*Rasaratnasamuccaya* 20.53–55; *Rasayogasāgara*, takārādi 211).

TRIPURĀNTAKA

aṣṭāṅgarasa (*Bhaiṣajyaratnāvalī*, arśas 260–261; *Rasayogasāgara*, akārādi 277; *Rasendrasārasaṃgraha*, arśas 31–32).

TRIVIKRAMA

trivikramarasa (*Vaidyacintāmaṇi* 200).

TRYAMBAKA

mahāgandhahastyagada (Ca.Ci.23.77–94; taught by Tryambaka to Vaiśravaṇa).

VAIDYAKUMĀRAKAS

romavedharasa (*Rasakāmadhenu* IV.1.261–263).

VAIDYANĀTHA

pratāpalaṅkeśvararasa (*Bṛhadrasarājasundara* 320; *Rasaratnasamuccaya* 12.111–114; *Rasayogasāgara*, pakārādi 236).

a recipe against śvitra (*Toḍara* VII: 5.144).

śrīkāmeśvaramodaka (*Rasaratnākara* II, grahaṇī 27–33; *Rasendracintāmaṇi* 90–91).

śrīvaidyanāthavaṭī (*Rasendrasārasaṃgraha*, grahaṇī 48–53).

śrīvaidyanāthavaṭikā (*Bṛhadrasarājasundara* 351).

vaidyanāthavaṭikā (*Bhaiṣajyaratnāvalī*, grahaṇī 301–307; *Dhanvantari*, grahaṇī 16).

vaidyanāthavaṭī (*Bhaiṣajyaratnāvalī*, udāvartānāha 46–48 and śoṭha 85–94;

Bhāratabhaiṣajyaratnākara, Nrs. 7129–7132; *Dhanvantari*, udāvarta 11, śoṭha 26;

Rasayogasāgara, yakārādi 615 and 616; *Rasendrasārasaṃgraha*, udāvartānāha 1–2).

VAIŚVĀNARA

vaḍavānalavaṭī (*Rasakāmadhenu* IV.13.632–69; *Rasayogasāgara*, yakārādi 415).

VAJRAPĀṆI²²

VARUṆA²³

nimbāriṣṭa (A.s.Ci.21.29–31).

VĀSAVA

vāsākūṣmāṇḍalehya (*Vaidyacintāmaṇi* 259).

VASU

bṛhallavaṅgādivaṭī (*Bhaiṣajyaratnāvalī*, agnimāndyādi 103–106;

Rasendrasārasaṃgraha, ajīrṇa 75–78).

VĀSUDEVA

bṛhacchatāvarimodaka (*Rasaratnadīpikā* 138–139).

caṇḍasaṃgrahagadaikakapāṭarasa (*Bṛhadrasarājasundara* 344; *Rasaratnasamuccaya* 16.54–56).

mahālakṣmīvilāsarasa (*Bhaiṣajyaratnāvalī*, rasāyana 89–101).

pramehadhvāntavivasvān rasaḥ (*Rasayogasāgara*, pakārādi 272).

rasacandrikā vaṭī (*Bhaiṣajyaratnāvalī*, śīroroga 63–67; *Bhāratabhaiṣajyaratnākara*,

Nr. 6061; *Bṛhadrasarājasundara* 528; *Rasayogasāgara*, yakārādi 67;

Rasendrasārasaṃgraha, śīroroga 1–5).

śatāvarimodaka (*Bhāratabhaiṣajyaratnākara*, Nr. 7569; *Dhanvantari*, vājīkaraṇa 9;

Rasaratnākara II, vājīkaraṇa 48–60; *Rasayogasāgara*, śakārādi 57).

svalpaśatāvarimodaka (*Rasaratnadīpikā* 137–138).

VĀSUDEVA MUNI

arkeṣa (*Rasaratnasamuccaya* 15.62–63).

VIDHI

āmavātagajasimhamodaka (*Rasendrasārasaṃgraha*, āmavāta 21–26).

VINDHYAVĀSIPĀDA

śivāghṛta (*Bhaiṣajyaratnāvalī*, unmāda 81–92).

VIṢṆU²⁴

āmavāteśvararasa (*Bhaiṣajyaratnāvalī*, āmavāta 73–82; *Dhanvantari*, āmavāta 25 and 30; *Rasendrasārasaṃgraha*, āmavāta 9–15).

aśokaghṛta (*Bhaiṣajyaratnāvalī*, pradara 103–109; *Bhāratabhaiṣajyaratnākara*, Nr. 171; *Rasaratnākara* II, pradara 35–41; *Vaṅgasena*, strīroga 57–63).

bālanārāyaṇataila (Niścala ad *Cakradatta*, vātavyādhi 96–105).

br̥hacchṛṅgārābhra (*Bhaiṣajyaratnāvalī*, kāsa 139–145; *Bṛhadrasarājasundara* 421 and 549; *Dhanvantari*, kāsa 30; *Rasendrasārasaṃgraha*, kāsa 93–100 and *rasāyana* 100–106).

br̥hatkīrītādyataila (*Rasaratnadīpikā* 96–97).

dinārdharasa (*Rasayogasāgara*, takārādi 311).

himasāgarataila (*Bhaiṣajyaratnāvalī*, vātavyādhi 516–527; *Bheṣajasamhitā* 12, Nr. 75; *Dhanvantari*, vātavyādhi 69).

kadalyādighṛta (*Dhanvantari*, somaroga 5).

kadalyādyaghr̥ta (*Bhāratabhaiṣajyaratnākara*, Nr. 824).

kāntavallabharasa (*Rasayogasāgara*, kakārādi 145; *Vaidyacintāmaṇi* 94).

madhyamaviṣṇutaila (*Bhaiṣajyaratnāvalī*, vātavyādhi 315–324; *Dhanvantari*, vātavyādhi 63).

madhyanārāyaṇataila (Ṭoḍara V: 11.624–635).

mahājvarāṅkuśarasa (*Vaidyacintāmaṇi* 44).

mahānārāyaṇataila (*Dhanvantari*, vātavyādhi 67).

mahāviṣṇutaila (*Rasaratnadīpikā* 276–277).

navajvaraharī vaṭikā (*Rasapaddhati* 160).

nityodararasa (*Dhanvantari*, kāsa 31; *Rasendrasārasaṃgraha*, yakṣman 100–107).

pañcāmṛtarasa (*Dhanvantari*, rasāyana 4; *Rasaratnākara* II, rasāyana 32–40).

sarvāṅgasundararasa (*Dhanvantari*, śūla 55; *Rasendrasārasaṃgraha*, śūla 41–45).

śatāvarītāila (*Bhāratabhaiṣajyaratnākara*, Nr. 7401; *Gadanigraha* I, taila 73–78).

śṛṅgārābhra (*Rasayogasāgara*, śakārādi 185).

svalpaviṣṇutaila (*Bhaiṣajyaratnāvalī*, vātavyādhi 307–314).

viṣṇuparākramarasa (*Rasayogasāgara*, yakārādi 567; *Vaidyacintāmaṇi* 199).

viṣṇutaila (*Bhāratabhaiṣajyaratnākara*, Nr. 6810; *Bheṣajasamhitā* 12, Nr. 66;

Bṛhadyogatarāṅgiṇī 90.245–251; *Cakradatta*, vātavyādhi 113–120; *Dhanvantari*, unmāda 30; *Ṭoḍara* V: 14.45–52).

viśvambhararasa (*Rasayogasāgara*, yakārādi 542; *Vaidyacintāmaṇi* 42, 70).

VIṢṆUNĀTHA

br̥hajjīrakādīmodaka (*Rasaratnadīpikā* 143–144).

VIŚVANĀTHA

mahāmṛtyuñjayarasa (*Rasaratnadīpikā* 355–356).

viśveśvararasa (*Bhaiṣajyaratnāvalī*, vātarakta 48–53; *Bhāratabhaiṣajyaratnākara*, Nr. 7066; *Dhanvantari*, vātarakta 24; *Rasendrasārasaṃgraha*, vātarakta 17–22).

VĪTIHOTRA

samnipātādāvānalarasa (*Rasayogasāgara*, śakārādi 261).

VR̥KODARA

a rasālā (*Napuṃsakāmṛtārṇava* 2.57–58).

VR̥ṢADHVAJA

saṃśamanayoga (*Dhanvantari*, atisāra 32).

vṛṣadhvajarasa (*Bhaiṣajyaratnāvalī*, chardi 24–27).

VR̥ṢṆINĀTHA

jīrakādīmodaka (*Bhaiṣajyaratnāvalī*, grahaṇī 202–212; *Bhāratabhaiṣajyaratnākara*, Nr. 2020; *Rasayogasāgara*, cakārādi 187).

VYĀSA²⁵

abhrādīparpaṭī (*Rasaratnadīpikā* 180).

gaṇḍīrīṣṭa (*Gadanigraha* I, āsava 342–353).

pramehamihirataila (*Rasaratnadīpikā* 341).

YOGASIDDHA

kāmacāramaṇḍūra (*Rasaratnadīpikā* 169).

YOGIN

candraprabhā vaṭī (*Rasakāmadhenu* IV.15.75–77).

YOGINĪ

svalpanāyikācūrṇa (*Rasaratnadīpikā* 121).

Appendix 2

References to medicine in non-medical literature

General books and articles: Atrideva Vidyālaṅkāra (1956). S.C. Banerji (1980). K.N. Dave (1985). S.L. Hora (1948a), (1951a). K.C. Jayaram (1950). Om Prakash (1961), (1987). K.S. Ramamurti (1971). B. Rama Rao (1986). H.S. Rao (1957). R. Syed (1990). G.U. Thite (1982). Vibhādevī (1979a), (1979b).

ĀDITYAYĀMALA¹

S.C. Banerji (1992): 188–189, 210.

ĀDIYĀMALA

S.C. Banerji (1992): 217, 239, 256.

AGHORATANTRA²

S.C. Banerji (1992): 205–206.

AMARAKOṢA

A.K. Biswas and S. Biswas (1996): 137. V. Dvivedī (1966): 248–253. B. Seal (1985): 171–172. P.V. Sharma (1972d): 242–247, (1979a), (1979d). *S. Sundara Rajan (1977). R.T. Vyas (1989): 63–66.

AṄGAVIJJĀ

A.K. Biswas and S. Biswas (1996): 135–136.

ARTHAŚĀSTRA

ABI 127–137. S. Ārya (1984): 24–26. R. Bhaṭnāgar (1988). A.K. Biswas and S. Biswas (1996): 39–56 and 235–241. D.K. Chakrabarti (1992): 106–109. A. Chattopadhyaya (1967). M. Choudhury (1963). Gulabkunverba I, 359–363. S.L. Hora (1948), (1951a): 408–409. O.P. Jaggi IV, 49–51 and 194–198. J. Jolly (1914a). Jyotir Mitra (1970b), (1974): 26–37, (1992): 35. S.S. Kamavisdar (1980). D. Kothari (1979). R.F.G. Müller (1927), (1930d), (1934a): 84–86, (1942): 22–24. S.R.N. Murthy (1978), (1990): 14–21. Om Prakash (1961): 87–101, (1987): II, 164–182. P. Rāy (1956): 49–58. P. Ray (1967): 15. D.V.S. Reddy *(1944a), *(1945a), (1966): 1–60. A. Śarmā (1981). B.R. Śāstrī (1980). Satyaprakāś (1960): 269–300. H. Scharfe (1993): 252–261 and 276–292. P.V. Sharma (1979a), (1992a): 142–146. A.N. Sinha (1989). A.N. Singh and R.S. Singh (1983). R.P. Trivedī (1992). R. Varmā Veṇu (1979). R.T. Vyas (1989): 30. M. Winternitz (1977): 100–101. J. Yādava and Jyotirmitra Ācārya (1979).

AŚVAGHOṢA

Atrideva (1956): 32–50. Jyotir Mitra (1974): 50–56 and 136–140. P.V. Sharma (1970a): 43–46, (1992a): 124. Ś. Vidyālaṅkāra (1980).

AŚVINĪTANTRA

S.C. Banerji (1992): 189, 197, 198, 199, 202, 203, 209.

ATHARVAVEDA

ABI 31–63. Atrideva (1978): 186–188. AVI 38–41. L.C. Barret (1933). V.V. Bhide (1981). M. Bloomfield (1886), (1890), (1987): 441–444. D. Chattopadhyaya (1979): 306–314. T. Chowdhury (1931). S. Dasgupta (1975): II, 273–301. DGV IV, 202–205. K.D. Dvivedī (1999). J. Gonda (1965): 157–158. J.V. Grohmann (1865). J.R. Haldar (1977): 12–18. A.F.R. Hoernle (1978): 109–114 and 242. S.L. Hora (1952). W.A. Jayne (1925): 151–152. J.C. Joṣī, M.G. Pāṇḍeya and J. Pāṇḍeya (1993). V.W. Karambelkar (1961). R.R. Kashyap (1935/36). A. Kuhn (1864). S. Mahdihassan (1980a). W.W. Malandra (1979). G.N. Mukerjee (1927a), (1928). R.F.G. Müller (1930b), (1934a), (1935d), (1937), (1955), (1956b), (1958b), (1964). A. Narayana (1995). H.Ch. Patyal (1968/69), (1977). A. Pictet (1856). H.G. Ranade (1981). M. Roy (1966), (1970). T. Śarmā (1981/82): 14–16. B. Schlerath (1962). P.V. Sharma (1979a). N.J. Shende (1985). H.G. Singh (1977): 15–82, (1980). G.U. Thite (1982). K.G. Zysk (1985).

AVADĀNAŚATAKA

P.V. Sharma (1992a): 120.

BALLĀLA – BHOJAPRABANDHA

R.F.G. Müller (1959).

BALLĀLASENA – DĀNASĀGARA

A.F.R. Hoernle (1978): 42.

BĀṆA

ABI 249. Atrideva (1956): 96–102. D.V.S. Reddy *(1944c), *(1945b), *(1946a), (1946b), *(1948), *(1950a). P.V. Sharma (1972d), (1975b), (1979a), (1992a): 146–149. S.R. Sarma and Y. Sahai (1995): 151. V. Venkatachalam (1975).

BHĀGAVATAPURĀṆA

S. Śarmā (1997). P.V. Sharma (1979a), (1992a): 99. D. Śukla (1993).

BHĀRATANĀṬYAŚĀSTRA

R.K. Sen (1954), (1966).

BHĀRAVI

Atrideva (1956): 74–75. J.P. Thaker (1972).

BHĀSA

Atrideva (1956): 28–31. D.V.S. Reddy (1944b).

BHĀSKARAKAṆṬHA – CITTĀNUBODHAŚĀSTRA
W. Slaje (1993).

BHAVABHŪTI

Atrideva (1956): 103–106. P.V. Sharma (1979a).

BHOJA – SAMARĀNGAṆA-SŪTRADHĀRA
Mira Roy (1984).

BĪJACINTĀMAṆITANTRA³

S.C. Banerji (1992): 175–176, 186, 217, 219, 226, 238, 244, 244–245.

BRĀHMANAS

ABI 63–69. AVI 41–42. DGV IV, 205–206. P.E. Dumont (1957). J.R. Haldar (1977): 18–19. S. Jain (1981). R.F.G. Müller (1935d). R.S.S. Murthy (1970). H. Oertel (1897). T. Śarmā (1981/82): 22–23. P.V. Sharma (1979a), (1992a): 26–27. P.V. Tewari (1992a): 72–73.

BRAHMAPURĀṆA

P. Sensarma (1989): 97–102. P.V. Sharma (1992a): 93–94.

BRAHMAVAIVARTAPURĀṆA

Anonymous (1965b): 209. N. Gangadharan (1997). P. Sensarma (1989): 55–68. P.V. Sharma (1992a): 100. Vṛddhatrayī 6–7.

BRHADĀRAṆYAKOPANIṢAD

S. Mahdihassan (1953). Mira Roy (1966). A. Singh and L.V. Guru (1981).

BUDDHIST LITERATURE

ABI 91–110. Atrideva Vidyālaṅkāra (1978): 225–232. A.K. Bagchi (1997): 38–39. P.V. Bapat (1933/34), (1963). S. Beal (1884): I, 78–79 and 88. N.K. Bhattasali (1929): 63–65. R. Birnbaum (1989). K. Butzenberger and M. Fedorova (1989). D.K. Chakrabarti (1992): 112–115. B.M. Chintamani and B.V. Subbarayappa (1971). P. Demiéville and J. Filliozat (1937). V. Deshpande (1987). E.T. Fenner (1983). Ph. Granoff (1998a). M. Hahn (1997). J.R. Haldar (1977). O.P. Jaggi IV, 51–58. J. Jaworski (1927), (1929/30). K.C. Jayaram (1950). Jyotir Mitra (1974): 3–21 and 73–140, (1974b), (1975), (1977), (1978), (1978b), (1985), (1992): 34–35, (1999). S.S. Kamavisdar (1980). B.C. Law *(1940), (1945/46). Liacre-de Saint-Firmin (1916). J. Liyanaratne (1994), (1996). R.C. Majumdar (1971): 220–222. H. Nakamura (1989). Om Prakash (1961): 58–86, (1987): II, 125–163. C. Patra (1996): 75–106. D.V.S.

Reddy (1956). K.E. Rehm (1969). Samdhong Rinpoche (1974). T. Śarmā (1981/82): 31–34. D.N. Sen (1897). P.V. Sharma (1992a): 117–128. R.S. Singh (1979). O. Stein (1933). M.V. Talim (1967). M. Tatz (1985). I. Veith and A. Minami (1966). A. Waley (1930/32). M.G. Weiss (1977): 16. Yashpal (1949). L. Zwilling (1989). K.G. Zysk (1988), (1991), (1997).

CŪLAVAMSA

A. Senadhira (1995): 4–7.

DĀMARATANTRA⁴

S.C. Banerji (1992): 188, 193, 194, 195, 198, 204, 207.

DAṆḍIN

Atrideva (1956): 89–95.

DHARMAŚĀSTRA

ABI 118–122. A.L. Basham (1976). S.C. Banerji (1955/56). B. Bhattacharya (1967). *A. Chattopadhyay (1968). S.L. Hora (1953). O.P. Jaggi IV, 48–49. Jyotir Mitra (1992): 37. R.F.G. Müller (1935a). Om Prakash (1961): 34–57, (1987): II, 95–125. B. Rama Rao (1982). S. Sengupta (1956). T. Śarmā (1976), (1981/82): 24. P.V. Sharma (1979a), (1992a): 29. L. Sternbach *(1945), (1948), (1949), (1965). P. Tivāri (1977). M.G. Weiss (1977): 24–32.

DHĀTRĪTANTRA

S.C. Banerji (1992): 200.

DHUNDIRĀJA – GĪRVĀṆAPADAMAÑJARĪ

P.K. Gode (1945f).

DĪPAVAMSA

Jyotir Mitra (1992): 37–38. R.F.G. Müller (1930d). D.V.S. Reddy (1962), (1966): 78–81.

DIVYĀVADĀNA⁵

ABI 145–147, 168. R.P. Bhaṭṭnāgar (1978). Jyotir Mitra (1970b), (1974): 57–62. R.F.G. Müller (1934a): 89. P.V. Sharma (1968): 62–63, (1992a): 120–121. K. Upreti (1995).

GARUḌATANTRA

S.C. Banerji (1992): 229.

GĀRUDĪTANTRA⁶

S.C. Banerji (1992): 177, 192, 203, 204–205, 226, 227, 230, 231, 233, 234, 235, 246, 247, 249, 253.

GRAMMATICAL LITERATURE

J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 426. Jyotir Mitra (1974): 38–39. Om Prakash (1961): 34–57 and 87–101, (1987): II, 95–125 and 164–182. P.V. Sharma (1977), (1979a), (1992a): 137–142.

GRHYASŪTRAS

V.M. Apte (1954): 95–102, 117–126, 150–154. J.R. Haldar (1977): 19. B.C. Lele (1927). R.F.G. Müller (1934a): 99, (1935d). Om Prakash (1961): 34–57, (1987): II, 95–125. P.V. Sharma (1979a), (1992a): 28–29.

HĀLA

Atrideva (1956): 73.

HEMACĀNDRA

H.M. Johnson (1936).

INDRAJĀLATANTRA⁷

S.C. Banerji (1992): 179, 181, 204.

INSCRIPTIONS

A. Chakravarti (1979). M. Chakravarti (1907). M.N. Deshpande (1971). J.M. de Figueiredo (1984). Gulabkunverba I, 303 and 306–307. G. Gurumurthy (1970). S.L. Hora (1950), (1951a): 409–410. P. Hymavathi (1993): 21–24, 43, 44, 46–48, 76, 79–80, 83–89, 144, 145, 146, 151, 153, 208, 217, 265, 269, 275–279, 287. Jyotir Mitra (1992): 38. K.H. Krishnamurthy and G. Chandra Mouli (1984): 47–48. R.F.G. Müller (1930d). K.R. Norman (1967). P.V. Parabrahma Sastry (1977). A.S. Ramanatha Ayyar (1937). B. Rama Rao (1975a), (1976a). D.V.S. Reddy (1940c), (1972b), (1972c). B.G.L. Swamy (1973).

ĪŚĀNAŚIVAGURUDEVAPADDHATI

S.C. Banerji (1988): 192.

PAṆḌITARĀYA JAGANNĀTHA

Atrideva (1956): 123–126.

JAIN LITERATURE

Atrideva (1961): 93–95. N. Balbir (1990), (1992). R. Bhaṭṭanāgar (1984). C. Caillat (1974). D.K. Chakrabarti (1992): 115–116. Ph. Granoff (1998b). R. Guru (1983). Hariścandra (1978). D.C. Jain (1980). H. Jain (1978). J.C. Jain (1947). N.L. Jain (1996): 363–559. R. Jain (1978), (1981). S. Jain (1975). K.C. Jayaram (1950): Jyotir Mitra (1992): 36. H.R. Kapadia (1962), (1964). J.F. Kohl (1953a), (1953b), (1954), (1955). B.C. Law (1945/46). Om Prakash (1961): 58–86, (1987): II, 125–163. B. Seal (1985): 188–193. Madhu Sen (1975): 123–190, 331–337. P.V. Sharma (1992a): 128–131. J.C. Sikdar (1980).

JAMBHĀLĪTANTRA

S.C. Banerji (1992): 256.

JĀTAKAMĀLĀ

P.V. Sharma (1979a): 105 and 111, (1992a): 124.

JĀTAKAS

*B.K. Barua (1963). S.L. Hora (1955). S.L. Hora and S.K. Saraswati (1955). Jyotir Mitra (1985). R.F.G. Müller (1928a), (1930b): 191–192. D.V.S. Reddy (1939c), (1940a).

JAYAVALLABHA – VAJĪLĀGGA

B.M. Chintamani (1971): 171.

JÑĀNASAMKALINĪTANTRA⁸

S.C. Banerji (1988): 195–199.

JYOTIRĪŚVARA – PAÑCASĀYAKA

B. Dossi (1998): 107–108. R. Schmidt (1911): 579–658. L. Sternbach (1962). Vibhā Devī (1978a).

KĀLIDĀSA

M.V. Apte (1951). Atrideva (1956): 51–70. T. Chandrasekharan (1946). B. Deb (1955). C.S. Gupta (1963). H. Hensgen (1958). *H. Kimura (1969/70). *H. Kreyenborg (1921). S.C. Law (1924). G.R. Nandargikar (1971): Critical Notice 197–200. S.P. Narang (1976): 358–361. B. Rama Rao (1963). P.V. Sharma (1972d): 235–236, (1979a). M. Uniyāl (1975), (1976).

KĀLIKĀPURĀṆA

R.T. Vyas (1989): 46–48.

KĀLĪTANTRA⁹

S.C. Banerji (1988): 123–125 and 199–203.

KALPASŪTRAS

DGV IV, 207–212. P.V. Tewari (1992a): 76–78.

KALYĀṆAMALLA – ANAṆGARĀṆGA

R. Schmidt (1911): 578–656. L. Sternbach (1962).

KANNADA LITERATURE

K.T. Achaya (1994): 92–93, 118–123, 125–126.

KAPĀLATANTRA

S.C. Banerji (1992): 212.

KĀTYĀYANA

DGV IV, 213–215. Jyotir Mitra (1974): 22–24. P.V. Sharma (1992a): 139–140.

KAUŚIKASŪTRA

J.R. Haldar (1977): 19. R.F.G. Müller (1930b). P.V. Sharma (1979a).

KOKKOKA – RATIRAHASYA

K. Mylius (1993), (1995), (1997). R. Schmidt (1911): 584–656. L. Sternbach (1962).

KUMĀRĪTANTRA¹⁰

S.C. Banerji (1992): 193, 201, 203, 209.

KŪRMAPURĀṆA

G.K. Pai (1973), (1975): 276–321. M. Saksenā and I.P. Sinha (1991). P. Sensarma (1989): 27–37.

LALITAVISTARA

P.V. Sharma (1992a): 122–123. E.J. Thomas (1985).

LIṄGAPURĀṆA

Madanlal (1973).

MĀGHA

Atrideva (1956): 107–112. S. Sharma (1978).

MAHĀBHĀRATA

ABI 80–86. A.A. Ayer and A. Girija (1963). V.M. Bedekar (1964). J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 422. R.K. Bhārilla (1978). G.H. Bhatt (1960). A.K. Biswas and S. Biswas (1996): 57–67. P. Cordier (1894). J.R. Haldar (1977): 20. O.P. Jaggi IV, 46–48. Jyotir Mitra (1969), (1981), (1992): 34, (1995). M.A. Mehendale (1987a), (1987b), (1993). R.F.G. Müller (1934a): 86–87, (1935), (1942): 20–21, (1956), (1956a), (1963a). Om Prakash (1961): 102–131, (1987): II, 183–220. B. Rama Rao (1986). T. Śarmā (1981/82): 26–28. P.V. Sharma (1979a), (1992a): 89–92. C.V. Vaidya (1933): 103–121.

MAHĀBHĀṢYA

ABI 474–475. DGV IV, 215–216. D.K. Chakrabarti (1992): 105. Om Prakash (1961): 87–101, (1987): II, 164–182. P.V. Sharma (1970a): 25–39.

MAHĀKĀLATANTRA

S.C. Banerji (1992): 228, 246, 251. W. Stablein (1976a): 260–287.

MAHĀVAGGA

HIM III, 749–757. I.B. Horner (1962): 269–350 (Mahāvagga VI). R.F.G. Müller (1934a). D.V.S. Reddy (1984). P.V. Sharma (1992a): 118–119.

MAHĀVAMSA

W. Geiger (1960): 76–78. Gulabkunverba I, 305–306. R.F.G. Müller (1930d). D.V.S. Reddy (1962), (1966): 76–81. A. Senadhira (1995): 3. C.G. Urugoda (1975), (1987).

MAHĀVASTU

T. Rahula (1978): 348–352.

MAHĀVYUTPATTI

P. Cordier (1903a): 618–620.

MAHĀYĀNA LITERATURE

F. Huebner (1932). Jyotir Mitra (1974): 56–62. N. Nakada (1987). P.V. Sharma (1992a): 122–125. R. Tripāthi (1987).

MALLINĀTHA

P. Hymavathi (1993): 25. K.S. Ramamurti (1971). B. Rama Rao (1979).

MAÑJUŚRĪMŪLAKALPA

M. Lalou (1932).

MANUSMṚTI

P. Cordier (1894). Gulabkunverba I, 354–355. Jyotir Mitra (1974): 39–48. R.F.G. Müller (1935a). Om Prakash (1961): 102–131, (1987): II, 183–220. P.V. Sharma (1979a).

MĀRKAṆḌEYAPURĀṆA

P.V. Sharma (1979a), (1992a): 95–96.

MĀTRKĀTANTRA¹¹

S.C. Banerji (1992): 225.

MATSYAPURĀṆA

B. Rama Rao (1965): 209. K.K. Handiqui (1949): 461. S.G. Kantawala (1964): 234–251 and 413–445. P. Sensarma (1989): 39–53. P.V. Sharma (1992a): 95.

MATSYASŪKTA(TANTRA)¹²

S.C. Banerji (1992): 187, 188, 192, 207, 209, 215, 219, 222, 223, 224, 232, 233, 234, 246, 247, 258. R. Mitra (1873): 16–17.

MATSYATANTRA¹³

S.C. Banerji (1992): 178, 215.

MĀYĀTANTRA¹⁴

S.C. Banerji (1992): 214.

MEDINĪ

P.V. Sharma (1979a): 58.

MILINDAPAÑHA

ABI 139–145. D. Chattopadhyaya (1979): 341–355. Jyotir Mitra (1974), (1985). A. Sharma (1989). P.V. Sharma (1992a): 121–122.

MR̥GENDRATANTRA¹⁵

S.C. Banerji (1988): 394–396.

NANDIPURĀṆA

Gulabkunverba I, 298–300. Jyotir Mitra (1992): 37.

NĀRADAPURĀṆA

K. Damodaran Nambiar (1977): 278–334, (1979): 278–334. P.V. Sharma (1992a): 101.

NĀRADASMṚTI

J. Jolly (1893b).

NĪLATANTRA¹⁶

S.C. Banerji (1992): 218, 219, 220, 220–221.

PADMAPURĀṆA

B. Rama Rao (1977). P.V. Sharma (1992a): 94. Vibhā Devī (1978b).

PADMAŚRĪ – NĀGARASARVASVA

R.T. Vyas (1989): 58–61.

PAÑCATANTRA

Atrideva (1956): 71–72. P.V. Sharma (1972d): 251–256.

PĀṆINI

ABI 87–90. V. Agravāl (1946), (1955/56): 115–135 and 212–222. V.S. Agrawala (1913), (1940), (1946), (1949). Atrideva (1956): 24–27. R. Bhaṭṭācārya (1963/64). A.K. Biswas and S. Biswas (1996): 29–38 and 221–234. D.K. Chakrabarti (1992): 105. DGV IV, 213–214. O.P. Jaggi IV, 48. S. Jain (1978). Madhūlikā and Ś. Dīkṣit (1995). T. Śarmā (1981/82): 28–29. P.V. Sharma (1978), (1992a): 137–142. R.S. Singh and V.D. Vyas (1983).

PHETKĀRATANTRA¹⁷

S.C. Banerji (1992): 176, 228, 232, 238, 250.

PRAKRIT LITERATURE

K.T. Achaya (1994): 95, 97.

PRAPAÑCASĀRATANTRA¹⁸

S.C. Banerji (1988): 288–290.

PRAŚASTAPĀDA

J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 426–427.

PRAŚNOPANIṢAD

Madanlal (1977). R.S. Singh and V.D. Vyas (1983). P.V. Sharma (1992a): 95.

PURĀṆAS

ABI 111–118. Anonymous (1965b). S.C. Banerji (1991): 73–149, 483–513. O.P. Jaggi IV, 49. J.J. Meyer (1930), (1933). D.V.S. Reddy (1965a), (1965b). T. Śarmā (1976), (1981/82): 19–20. B. Seal (1985): 187–188. P. Sensarma (1989). P.V. Sharma (1992a): 93–104. B. Tripāthi (1976).

RĀJAŚEKHARA

P.V. Sharma (1972d): 115, (1979a): 47, 48.

RĀJATARANĠINĪ

C.F. Heusinger (1847). J. Jolly (1914a). R.F.G. Müller (1930d). D.V.S. Reddy (1973).

RĀMĀYAṆA

ABI 76–80. J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 421–422. K.M. Balapure, J.K. Maheshwari, R.K. Tandon (1987). K.M. Bālapure, R.K. Tāṇḍan, J. Māheśvarī (1990). A.K. Biswas and S. Biswas (1996): 57–67. Sibadas Chaudhuri (1952), (1953), (1954). P. Cordier (1894). P.C. Dharma (1938). J.R. Haldar (1977): 19–20. S.L. Hora (1952a). O.P. Jaggi IV, 46. S. Jain (1978). Jyotir Mitra (1968), (1969a). C.R. Karnick (1975). *K.H. Krishnamurthy (1996). Om Prakash (1961): 102–131, (1987): II, 183–220. J. Pāṇḍey (1996). D.V.S. Reddy *(1943), *(1944d), *(1945c). Mira Roy (1963). T. Śarmā (1981/82): 25–26. P.V. Sharma (1979a), (1992a): 87–89.

ŚAMĪKATANTRA

S.C. Banerji (1992): 196, 199.

ŚĀRṆGADHARAPADDHATI

R.T. Vyas (1989): 32–35.

ŚARVAVIJAYĪTANTRA
S.C. Banerji (1992): 242.

ŚAṢṬHĪTANTRA
S.C. Banerji (1992): 193, 198–199, 200, 205, 207–208.

ŚATAPATHABRĀHMAṆA
A.F.R. Hoernle (1978): 104–109, 238–239, 240–241. R.F.G. Müller (1934a), (1954).
Satyaprakāś (1960): 27–77.

SAUGATATANTRA
S.C. Banerji (1992): 209.

ŚIKHIMAYŪRATANTRA
S.C. Banerji (1992): 237.

ŚIVAGĪTĀ
A. Comba (1981), (1982), (1984b). *M. Vallauri (1942).

ŚIVAPURĀṆA
Anonymous (1965b): 209.

SKANDAPURĀṆA
R.K. Dube (1998). Gulabkunverba I, 300–301. Jyotir Mitra (1992): 37. S.R.N. Murthy (1990): 69–99.

SMARADĪPIKĀ
R. Schmidt (1911): 602, 615–616, 621–622, 627–628, 646, 653. L. Sternbach (1962).

SOMADEVA – KATHĀSARITSĀGARA
A. Chattopadhyay (1970). O.P. Jaggi V, 154–157. D.V.S. Reddy (1965), (1967).

SOMADEVA – YAŚASTILAKA
K.K. Handiqui (1949). R. Jain (1978). *D.V.S. Reddy (1975). Vibhādevī (1979).

ŚRAUTASŪTRAS
W. Caland (1901), (1902). R.F.G. Müller (1935d). P.V. Sharma (1992a): 28.

ŚRĪHARṢA – NAIṢADHĪYACARITA
K.T. Achaya (1994): 97. Ś. Śarmā (1977). P.V. Sharma (1972e).

ŚŪDRAKA
Atrideva (1956): 76–81.

ŚUKASAPTATI
R. Schmidt (1911): 274–285.

ŚUKRANĪTI
ABI 264–266. B.K. Sarkar (1974).

TAMIL LITERATURE
K.T. Achaya (1994): 43–52. K. Palanichamy and B. Lalitha Palanichamy (1983).

TANTRIC LITERATURE
S.C. Banerji (1988), (1992). B.C. Joshi (1984), (1986), (1987). B. Seal (1985): 219–228. W. Stablein (1976a): 21–83, (1976b), (1980). M.L. Walter (1980). A. Wayman (1973), (1976).

TĀRĀPRADĪPA¹⁹
S.C. Banerji (1992): 185, 186, 195, 198, 199, 204, 216–217, 219, 237, 241, 242, 251, 252, 254.

TĀRĀTANTRA²⁰
S.C. Banerji (1992): 6–9, 195, 237.

TELUGU LITERATURE
P. Hymavathi (1993): 25–28, 178–180, 186, 188–191, 201–204, 208–211, 213–216, 224–225, 242, 244–245, 248–252, 256, 260–261, 264–266, 268, 270, 275, 292–325, 337–351.

TOPALATANTRA²¹
S.C. Banerji (1992): 186, 251.

TRIVIKRAMA BHATṬA
Atrideva (1956): 113–117.

TULSĪDĀS
K.M. Balapure, J.K. Maheshwari, R.K. Tandon (1987). K.M. Bālāpure, R.K. Tanḍan, J. Māheśvarī (1990). L.D. Dwivedi and L.V. Guru (1975). *P.V. Sharma (1971f). S. Soni (1981).

UDAYANA
K.A. Chowdhury (1971): 388.

UPDĀMARATANTRA²²
S.C. Banerji (1992): 178.

UMĀSVĀTI
J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 428–430.

UPANIṢADS

E. Abegg (1945): 5–36. G.W. Brown (1919), *(1921). DGV IV, 207. J.R. Haldar (1977): 19. R.F.G. Müller (1937b): 270–276. B. Rensch (1966). T. Śarmā (1981/82): 21–22. N. Śāstrī (1981). P.V. Sharma (1979a), (1992a): 27–28. P.V. Tewari (1992): 74–75.

VAIJAYANTĪKOŚA

P.V. Sharma (1979a): 45

VĀKPATIRĀJA – GAÜḌAVAHA

P.V. Sharma (1979a).

VĀMANAPURĀṆA

V.S. Agrawala (1964). A.S. Gupta (1968): Appendix 5. P. Sensarma (1989): 7–17. P.V. Sharma (1992a): 100–101.

VARĀHAMIHIRA

S.R.N. Murthy (1978), (1990): 21–32. P.V. Sharma (1972d), (1979a), (1986d). A.M. Shastri (1969), (1991), (1992). B.P. Shastri (1929). R.T. Vyas (1989): 38–44.

VĀRĀHĪTANTRA²³

S.C. Banerji (1992): 188, 195, 203, 206–207, 208, 210, 238, 242.

VARṆARATNĀKARA

P.D. Jopaṭ (1976).

VĀTSYĀYANA – KĀMASŪTRA

H.C. Chakladar (1919), (1929). B.H. Kapadia (1961/62). R. Schmidt (1911). P.V. Sharma (1979a). L. Sternbach (1962).

VĀYUPURĀṆA

D.R. Patil (1973). P. Sensarma (1989): 19–26. T. Śarmā (1981/82): 20. P.V. Sharma (1992a): 96–98.

VEDIC LITERATURE

E. Abegg ((1945): 5–36. ABI 7–75. K.T. Achaya (1994): 28–40. Atrideva (1978): 10–21. Th. Aufrecht (1870), *(1881). AVI 6–44 and 81–89. A.A. Ayer and A. Girija (1957). M.N. Banerjee (1927), (1929). A. Bareau (1969). E. Benveniste (1945). J.L. Bhaduri, K.K. Tiwari, Biswamoy Biswas (1971): 417–421 and 425. A.K. Biswas and S. Biswas (1996): 5–27 and 213–220. C.J. Blair (1961): 97–107 and 136–157. I. Bloch (1902): 135–138. M. Bloomfield (1886), (1890), (1891). H.W. Bodewitz (1986). G.M. Bolling (1910), (1911), (1911a), (1912). J. Brough (1971), (1973). T. Burrow (1970). W. Caland (1901), (1902). D.K. Chakrabarti (1992): 96–104 and 120–123. C. Chakraborty (1977). K.A. Chowdhury (1971): 375–378. P. Cordier (1896). R.N. Dandekar (1938), (1950), (1995). R.P. Das (1987). DGV IV, 200. P.E. Dumont

(1957), (1958). K. Dvivedī (1993). V. Dvivedī (1966): 277–281. F. Edgerton (1958). T.I. Elizarenkova and V.N. Toporov (1976). R.E. Emmerick (1985). A.H. Ewing (1901). H. Falk (1989). J. Filliozat (1943), (1975). I. Fischer (1922). I. Gershevitch (1974). A.K. Ghosh and S.N. Sen (1971): 375–378. G.S. Ghurye (1979): 127–129, 220–221, 228–233, 242–244, 249–250, 266–269, 307–309. J. Gonda (1952). J.R. Haldar (1977): 11–12. J. Haudry (1988). V. Henry (1897), (1988). J. Hertel (1930). A.F.R. Hoernle (1906–1907), (1978). K. Hummel (1997). D.H.H. Ingalls (1971). K. Hoffmann (1955). O.P. Jaggi (1969): 166–220. S.W. Jamison (1986), (1987). W.A. Jayne (1925): 151–178. G.C. Jhala (1978). J. Jolly (1901): 16–17. *R.L. Jones (1995). Jyotir Mitra (1968a), (1970a), (1972a), (1979). R.N. Kapil (1970): 125–130. C.R. Karnick (1969), (1970), (1996): 11–27. C.G. Kashikar (1990). A.B. Keith (1908). S. Kramrisch (1975). A. Kuhn (1864). F.B.J. Kuiper (1969/70). P. Kutumbiah (1969): X–XV. G. Liétard (1862), (1898). A.A. Macdonell (1915). A.A. Macdonell and A.B. Keith II, 358–362. Madhūlikā (1995). S. Mahdihassan (1963), (1974), (1980b), (1981), (1982), (1982b), (1983), (1985), (1986), (1987a), *(1987b), (1988), (1989). G.P. Majumdar (1927), (1945), (1951), (1986). R.C. Majumdar (1971): 216–220. *S.Ch. Mitra (1933). J. Mulholland (1976). R.F.G. Müller (1930), (1930b), (1935d), (1942): 6–19, (1951), (1955), (1956b), (1958): 13–24, (1960a). J. Narten (1980). H. Nyberg (1995). Om Prakash (1961): 7–33, (1987): II, 58–94. A. Parpola (1995): 370–372. H.Ch. Patyal (1968/69), (1977). J. Puhvel (1970). N.A. Qazilbash (1960). M.S. Randhawa (1980): 297–300. K. Bhasker Rao (1958). W. Rau (1974). P. Ray (1986a), (1986b). S. Raychaudhuri (1986). S.P. Raychaudhuri, L. Gopal, B.V. Subbarayappa (1971): 352–354. D.V.S. Reddy (1972c). *P. Regnaud (1897). L. Renou (1955). R. Roth (1871). P. Rolland (1972). Mira Roy (1967a). N.C. Śāh and D. Baḍolā (1977). V. Sarianidi (1998). D.C. Śarmā (1968/69). P.J. Sarma (1939). T. Śarmā (1981/82): 11–16 and 44–55. Satyaprakāś (1960): 1–26. L. von Schroeder (1908): 369–376. A.L. Sharma, A.B. Seerwani and V.R. Shastry (1972). D.C. Sharma and N.H. Keswani (1974). P.V. Sharma (1964a), (1965), (1971e), (1975c), (1977a), (1979a), (1992a): 11–67, (1992b). S.D. Sharma (1980). V.R. Shastry (1963). H.E. Sigerist (1961): 148–165. R. Singh (1998). R.S. Singh (1979a). W. Slaje (1997). S.C. Śrīvāstava *(1978a), (1978b), (1978c), (1979a), (1979b), (1979c), (1979d), (1980b), (1980c), (1980d), (1982). F. Staal (1975): 201–204. R. Stuhmann (1985). B.V. Subbarayappa (1971): 283–290. V. Śukla (1977). C. Suneson (1991). B.G.L. Swamy (1976a). P.V. Tewari (1992a). G.U. Thite (1982). A. Tivārī and Jyotirmitra (1981). M. Vallauri (1941): 20–27. Vishnu-Mittre (1970): 149–153. R. Gordon Wasson (1968), (1970), (1971), (1972), (1979). R. Gordon Wasson and D.H.H. Ingalls (1971). M.G. Weiss (1977): 7–11. G.L. Windfuhr (1985). H. Zimmer (1879), (1948). K.G. Zysk (1983), (1985a), (1993).

VEMANA

P. Hymavathi (1993): 94–97 and passim. V.V.S. Sastry (1977).

VIMALASŪRI – PAŪMACARIYA

K.R. Chandra (1970): 410–431, 450–453.

VĪRĀBHADRADEVA – KANDARPACŪḌĀMAṆI

R. Schmidt (1911): 603–605 and 616. L. Sternbach (1962).

VIŚĀKHADATTA

Atrideva (1956): 82–88. D.V.S. Reddy (1966): 70–75.

VIṢṆUDHARMOTTARAPURĀṆA

P.K. Gode (1946k). L. Gopal (1982). K.K. Gupta (1994). A.F.R. Hoernle (1978): 42–43. R.F.G. Müller (1955): 142, (1963): 384. P.V. Sharma (1970a): 75–80, (1972d): 37–38 and 54. R.T. Vyas (1989): 44–46.

VIṢṆUPURĀṆA

P.V. Sharma (1992a): 98–99. B.R. Shastri (1973).

VIṢṆUSMṚTI

A.F.R. Hoernle (1978): 40–42, 59–61, 209–214. J. Jolly (1893b). J.J. Meyer (1928).

YĀJÑAVALKYASMṚTI

ABI 120–121. M. Choudhury (1967). J. Jolly (1893b). J.J. Meyer (1928). A. Śarmā (1975). P.V. Sharma (1970a): 47–49.

YAJURVEDA

AVI 37–38. DGV IV, 201. J.R. Haldar (1977): 12. R.F.G. Müller (1934). *S.S. Sharma (1989). V.J. Thakar (1992).

YĀMALATANTRA²⁴

S.C. Banerji (1992): 211, 214, 219.

YĀSKA

DGV IV, 216.

YOGASĀRATANTRA²⁵

S.C. Banerji (1992): 188.

YOGASŪTRA

ABI 745. P.V. Sharma (1970a): 39–43.

YOGINĪTANTRA²⁶

S.C. Banerji (1992): 254.

YUKTIDĪPIKĀ

A. Wezler (1990).

Addenda et corrigenda

&

Reprints

Addenda et corrigenda

Notice

The numbers of the notes to Chapter 9 of Part 2 (Suśrutasaṃhitā) of volume IA (pages 369–371) conflict with those of the corresponding chapters of volume IB (pages 489–492): the notes to volume IA begin with notes 1, 1a, 1, 2, etc., while those to volume IB begin with notes 1, 1a, 2, 3, etc.

In order to make them match, one should change the notes to volume IA by making the series begin with 1, 1a, 2, 3, etc.

The numbers of the notes to Chapters 2 to 6 of Part 3 (Aṣṭāṅghṛdayasaṃhitā) of volume IA (pages 410–473) do not agree with the numbers of the notes to the corresponding chapters of volume IB (pages 528–594): the notes to volume IA begin with note 2, etc., whereas those to volume IB begin with note 1, etc.

Consequently, these numbers should be changed, either by making the notes to volume IA begin with 1, or making those of volume IB begin with 2.

In all cases where the presence or absence of an asterisk (*) in an annotation disagrees with the bibliography, the latter source is decisive.

I A, XIII: Cat. Calcutta Sanskrit College IX – change IX into X.

I A, 76, l.16 from below: abut – change into: about.

I A, 80, l.1: breast milk – change into: breastmilk.

I A, 80, l.13: meausres – change into: measures.

I A, 333, l.22 from below: *Kāśikāvṛtti* – change into: *Kāśikāvṛtti*.

I A, 503, l.13: tāpa – change into: tāpa-.

I B, 15, n.145: See on karman – add: R.P. Goldman (1985).

I B, 16, n.146: M. Müller (n.d.) – change into: M. Müller (1919).

I B, 16, n.146: T.W. Rhys Davids (1899) – change into: T.W. Rhys Davids and C.A.F. Rhys Davids (1899).

I B, 19, n.205: See on the Indian hospitals for animals – add: R. Froehner (1968): 575–576.

I B, 19, n.205: *A. 'Īsā (1928) – change into: A. Issa Bey (1928).

I B, 20, n.207: See on karpāsa – add: D. Schlinghoff (1974).

I B, 57, n.684: See on alcoholic drinks – add: B.R. Mitra (1873).

I B, 62, n.32: S.N. Mishra (1973–74) – change into: S.N. Mishra (1974).

- I B, 65, n.93: See on insanity: S. Pathak (1973–74) – change into: S. Pathak (1974); K.P. Shukla (1973–74) – change into: K.P. Shukla (1974).
- I B, 65, n.93: See on psychiatric syndromes in Indian patients: E.M. Hoch *(1967) – delete *; *N.C. Surya et al. (1964) – delete *; add: J. Ananth (1978); A. Chakraborty (1964); *S. Kakar (1975); M.S. Keshavan, H.S. Narayanan and B.N. Gangadhar (1989); B. Mohan (1973); S. Rao (1966a); N.N. Sen and N. Sundararaj (1958–1960); H.K. Sukthankar and N.S. Vahia (1965); N.S. Vahia (1963).
- I B, 71, n.48: *T. Elizarenkova (1987) – delete *.
- I B, 78, n.34: J. Brough *(1953) – delete *; edited (by P. Chentsalrao): add *; *translated into English – delete *.
- I B, 78, n.42: See on sexual fluids in Indian thought – add: B. Dossi (1998).
- I B, 79, n.56: See on transvestism, homosexuality, etc., in India – add: *G.T. Artola (1975); S. Caldwell (1999a); L. Zwilling (1989).
- I B, 80, n.64: see on the ātivāhikaśāstra – add: B. Dossi (1998): 139–150.
- I B, 81, n.83: See on Indian embryology – add: B. Dossi (1998): 91–97.
- I B, 92, n.285: See on the Indian joint family – add: A. Collins and P. Desai (1999); W. Doniger (1993); J. Mencher (1963); M. Mines (1994); L.B. Murphy (1953); T. Poffenberger (1981).
- I B, 92, n.285: *G. Bose (1949), (1950) – change into: G. Bose (1949), *(1950).
- I B, 92, n.285: *A. Dammann (1993) – delete *.
- I B, 95, n.32: See on dreams – add: A. Crescenzi and F. Torricelli (1997).
- I B, 98, n.11: See for some studies: J.D. Gode (1973–74) – change into: J.D. Gode (1973); *J.K. Ojha (1978) – delete *.
- I B, 98, n.12: See for some studies: J.D. Gode (1973–74) – change into: J.D. Gode (1973).
- I B, 104, n.116: See on sorcery – add: G. Obeyesekere (1975); G. Tarabout (1994).
- I B, 105, n.129: See on this mātṛgaṇa – add: N.P. Joshi (1986); O.P. Misra (1989); S.K. Panikkar (1997).
- I B, 106, n.154: S.N. Mishra (1973–74) – change into: S.N. Mishra (1974).
- I B, 107, n.177: See on the treatment of diabetes mellitus: A.N. Chaddha (1973–74) – change into: A.N. Chaddha (1974).
- I B, 108, n.177: M.C. Pandey (1973–74) – change into: M.C. Pandey (1975); Raghu-nathan and P.V. Sharma *(1968) – delete *; *V.K. Shah (1995): delete *.
- I B, 109, n.206: See on the treatment of leprosy: A. Kumar (1973–74) – change into: A. Kumar (1974); B.P. Singh (1971–73) – change into: B.P. Singh (1973).
- I B, 110, n.218: See on the treatment of śvitra: Z. Ansari (1971–73) – change into: Z. Ansari (1973).
- I B, 112, n.256: P.J. Claus *(1975) – delete *; see, for example – add: B. Becker-Pfeiderer and Virchand Dharamsey (1978); M. Carrin (1999a), (1999b); A.G. Gold (1988); B. Pfeiderer (1983), *(1994); J. Richardson Freeman (1993); E. Schoenbucher (1993).
- I B, 112, n.264: See on the gandharvas – add: B. Dossi (1998): 139–150; F.B.J. Kuiper (1996).
- I B, 113, n.271: See on the treatment of unmāda: S. Pathak (1973–74) – change into:

- S. Pathak (1974).
- I B, 113, n.271: See on psychotherapy in India – add: S. Kakar (1986), (1990a); B.K. Ramanujam (1986), (1999); A. Roland *(1985), *(1991), (1994).
- I B, 113, n.271: See on āyurvedic drugs used in treating mental disorders – add: N.C. Surya et al. (1965).
- I B, 113, n.271: See on the religious treatment of mental illness – add: P. Homans (1984); V. Skultans (1988).
- I B, 113, n.271: See on the treatment of mental disorders in general – add: B.B. Sethi, S. Sachdev and D. Nag (1965); See on the relevance of Yoga – N.S. Vahia et al. *(1973b) – delete *.
- I B, 116, n.321: See on cancer in India – add: W.C. Bental (1908); R.R. Cooke (1976); D.J. Jussawalla (1976a), (1976b); V.R. Khanolkar (1944a); U.K. Luthra (1976); S. Nissanga (1976); I.M. Orr (1933); J.C. Paymaster (1956); P.N. Wahi (1976); P.N. Wahi et al. (1965); P.N. Wahi, U. Kehar and B. Lahiri (1965).
- I B, 116, n.321: *R. Akhtar (1978b) – delete *.
- I B, 116, n.321: delete R. Akhtar and N. Izhar (1982).
- I B, 117, n.336: See on filariasis in India – add: L. Bandyopadhyay (1996).
- I B, 119, n.361: See on the actions of rohitaka: L.M. Singh (1973–74) – change into: L.M. Singh (1973).
- I B, 120, n.389: See on grahaṇīdoṣa: O.P. Dixit (1973–74) – change into: O.P. Dixit (1974).
- I B, 121, n.408: See on some studies: O.P. Dixit (1973–74) – change into: O.P. Dixit (1974).
- I B, 121, n.415: See on this disease: R.D. Tripathi (1973–74) – change into: R.D. Tripathi (1974).
- I B, 121, n.416: E. Thurston (1901) – delete (1901).
- I B, 122, n.427: See on the treatment of kāmālā – add: M.S. Durkin-Longley (1982): 323–348.
- I B, 123, n.459: See on the treatment of eosinophilia: B.P. Shaw (1973–74) – change into: B.P. Shaw (1974).
- I B, 125, n.501: See on psychosomatic disease in India – add: E.M. Hoch (1965); M. Pflanz and L. Lambelet (1965).
- I B, 125, n.502: See on diarrhoea in India – add: R.A. Feldman, P. Bhat and K.R. Kamath (1970); B. Lozoff, K.R. Kamath and R.A. Feldman (1975).
- I B, 134, n.724: P.D. Gupta (1973–74) – change into: P.D. Gupta (1974).
- I B, 134, n.725: See on the treatment of āsmarī – R.P. Singh (1973–74) – change into: R.P. Singh (1973); add: L.M. Singh, J.P. Shukla and P.J. Deshpande (1987).
- I B, 135, n.733: See on the treatment of hṛdroga: G.N. Chaturvedi (1973–74) – change into: G.N. Chaturvedi (1973); See on drugs lowering the cholesterol level: D.V. Aggarwal (1971–73) – change into: D.V. Aggarwal (1973).
- I B, 142, n.878: See on the treatment of karpiṇī: S.K. Negi (1973–74) – change into: S.K. Negi (1974).
- I B, 142, n.896: See on the treatment of pradara: S. Kumari (1973–74) – change into: S. Kumari (1974).

- IB, 148, n.120: J.-A. Decourdemanche *(1913) – delete *.
- IB, 142, n.888 – add: See on pradara: M.S. Durkin-Longley (1982): 290–323.
- IB, 142, n.896 – add: See on the treatment of pradara: M.S. Durkin-Longley (1982): 290–323.
- IB, 184, n.16: *H. Maspero – delete *.
- IB, 184, n.20: D.C. Sircar (1986c) – change into: D.C. Sircar (1968c).
- IB, 186, n.40: hemānta – change into hemanta.
- IB, 186, n.49: See on these Śākadvīpīyabrāhmaṇas – add: K.K. Roy (1974): 699.
- IB, 187, n.60 – add: Carakas are mentioned in Sphujidhvaja's *Yavanajātaka* (22.1: āhiṇḍika; ed. D. Pingree). See on references to them also: D. Pingree (1978): II, 311.
- IB, 187, n.61: See on Nahapāna, Rṣabhadatta – add: D. Pingree (1978): I, 10–13.
- IB, 188, n.73: *A. Parpola (1977) – delete *.
- IB, 190, n.116: A. Weber *(1852) – delete *.
- IB, 195, n.176: *critical edition – delete *.
- IB, 235, n.5 – add: V.G. Rahurkar (1984).
- IB, 302, n.500: *H.D. Velankar – delete *.
- IB, 313, n.1: Editions of the *Suśrutasaṃhitā* – add to ed. cc: *repr., Jayakṛṣṇadāsa Āyurveda Granthamālā 34, Caukhambā Orientalia, Vārāṇasī/Dillī 1997; *repr., Krishnadas Ayurveda Series No. 51, 1998; add to ed. t: *repr., Caukhambā Āyurvijñān Granthamālā 60, Vārāṇasī 1999.
- IB, 314, n.1: Translations of the *Suśrutasaṃhitā* – add: *Suśruta-saṃhitā*, with English translation of text and Ḍaḥaṇa's commentary along with critical notes, edited and translated by Priya Vrat Sharma, Haridas Ayurveda Series 9, Chaukhambha Visv-abharati, Varanasi 1999.
- IB, 315, n.1: Translations of the *Suśrutasaṃhitā* – add to ed. e: *repr., edited by Jyotir Mitra, Chowkhamba Sanskrit Studies Vol. XXX, Varanasi 1998.
- IB, 323, n.110: See on the preparation and use of kṣāra: S.K. Pandey (1973–74) – change into: S.K. Pandey (1974).
- IB, 327, n.186: See on Indian rhinoplasty – add: T.J.S. Patterson (1974).
- IB, 338, n.445: *Y.C. Roy (1916) – change into: B.J.C. Ray (1918).
- IB, 349, n.689: See on betel – add: J.R. Marr (1972): 45–47.
- IB, 352, n.734: See on mantha – add: S. Einoo (1985).
- IB, 352, n.757: See – add: S. Einoo (1985).
- IB, 352, n.758: See – add: S. Einoo (1985).
- IB, 363, n.233: See on plague in India – add: D. Arnold (1991); M.N. Pearson (1995): 153–154.
- IB, 370, n.4: M. Müller, n.d. – change into: M. Müller, 1919.
- IB, 389, n.258: See on the Uttarakurus – add: G. Tucci (1971): II, 508, n.1.
- IB, 399, n.131: see on her and her cult – add: P.K. Maity (1989): 70–81.
- IB, 400, n.163: *R. Bleichsteiner (1937) – change into: *R. Bleichsteiner (1934).
- IB, 403, n.12: See on Indian ophthalmology – add: K.M. Shyam Sundar (1996).
- IB, 413, n.283: *P. Breton (1826) – delete *; R.H. Elliot *(1917b) – delete *.
- IB, 474, n.187: *V.G. Rahurkar (1964) – delete *.

- IB, 476, n.213: *L. de la Vallée Poussin (1931/32): I, 383, (1937): V, 270 – change into: *L. de la Vallée Poussin (1931/32): I, 383.
- IB, 476, n.216: *E. Lamotte (1966): XI – change into: E. Lamotte (1966): XI–XIV.
- IB, 479, n.267: *Edition – delete *.
- IB, 479, n.268: *P.V. Sharma (1993c) – delete *.
- IB, 485, n.401: Sempa Dorjee (1979) – change into: Sempa Dorje (1998).
- IB, 513, n.1: Editions of the *Aṣṭāṅgahṛdayasaṃhitā* – add: **Aṣṭāṅgahṛdaya* of Śrīmad-vāgbhaṭa, edited by Brahmānand Tripāthī, Vrajajivan Ayurvijnana Granthamala 27, Delhi 1999.
- IB, 516, n.1: Translations of the *Aṣṭāṅgahṛdayasaṃhitā* – add: **Aṣṭāṅga Hṛdaya* of Vāgbhaṭa: the book of eight branches of Ayurveda; English translation by a board of scholars, 3 vols., Indian Medical Science Series Nos. 75, 76, 77, Sri Satguru, Delhi 1999.
- IB, 564, n.102: Compare Kāṅkhorda – add: see on Kāṅkhorda: J. Nobel (1958): I, 230–233 (see: *Suvarṇaprabhāsa-sūtra*, n.1453).
- IB, 598, n.1: Translations of the *Aṣṭāṅgasamgraha* – add: **Aṣṭāṅga Saṃgraha* of Vāgbhaṭa: the compendium of eight branches of Ayurveda; text and English translation with illustrations by a board of scholars; introduction by Vaidya Asha Ram, 3 vols., Indian Medical Science Series Nos. 74, 78, 79, Sri Satguru, Delhi 1999.
- IB, 643, n.36: *E.M. Hare – delete *.
- IB, 643, n.36 – add: See on musāragalva: S.K. Chatterji (1939): 71–74; G. Tucci (1971): II, 519.
- IB, 679, n.62: See on the Śakas – add: D. Pingree (1978): I, 6–22.
- IB, 682, n.105: See on Aparājītā – add: F.W. Thomas (1903); L.A. Waddell (1912/1913): 173.
- IB, 682, n.108: See on Tārā – add: D. Kinsley (1997; see index).
- IB, 683, n.120: See on Avalokiteśvara – add: J.K. Locke (1980): 405–418.
- IB, 683, n.122: *N. Dutt (1939) – delete *.
- IB, 683, n.124: See on Parṇasābarī – add: F.W. Thomas (1903).
- IB, 684, n.139 – add: See on sitātapatra- and uṣṇīṣavijayādhāraṇīs: F.W. Thomas (1903); L.A. Waddell (1912/1913): 173.
- IB, 720, n.1191: Bhagwan Dash *(1995b), *(1998) – delete *; add: Bhagwan Dash (1999).
- IB, 765, n.255: T.W. Rhys Davids (*1899: II, 65) – change into: T.W. Rhys Davids and C.A.F. Rhys Davids (1899: *II, 65).
- IB, 766, n.259 – add: Jyotir Mitra (1999a).

Reprints*

* The following pages are corrected versions of the technically defective pages in
Volume IA.

Sixty-three combinations of tastes are distinguished;⁴⁷⁹ these combinations become innumerable if the after-tastes (anurasa) are also taken into consideration. Taste and after-taste are defined.⁴⁸⁰ Successful treatment depends on the proper administration of drugs with a particular combination of tastes (26.14–28).

The list of ten guṇas⁴⁸¹ consists of paratva (superiority), aparatva (inferiority),⁴⁸² yukti,⁴⁸³ saṃkhyā (number), saṃyoga (conjunction),⁴⁸⁴ vibhāga (disjunction),⁴⁸⁵ prthaktva (separateness),⁴⁸⁶ parimāṇa (measurement), saṃskāra (processing),⁴⁸⁷ and abhyāsa (repetitive practice) (26.29–35).

The relationships between the six tastes and the five mahābhūtas are discussed (26.39–41).⁴⁸⁸

The properties and actions of each of the six tastes are elaborately described (26.43),⁴⁸⁹ followed by relationships between tastes on the one hand, vīrya, guṇa and karman on the other; exceptions to general rules are given; the three degrees of the six chief properties (guṇa) with regard to the tastes are discussed (26.45–56).⁴⁹⁰

Vipāka (post-digestive taste) is dealt with; kaṭu, tikta and kaṣāya are transformed into kaṭu, amla remains amla, madhura and lavaṇa are madhura after digestion; three degrees of vipāka are distinguished (26.57–63).⁴⁹¹

Vīrya is taken account of; the number of vīryas is either eight: mṛdu (soft), tūkṣṇa (sharp), guru (heavy), laghu (light), snigdha (oleaginous), rūkṣa (dry), uṣṇa (hot) and śīta (cold), or two only: śīta and uṣṇa (26.64–67).⁴⁹²

Prabhāva (specific action) is described as a property which cannot be explained, being beyond reasoning (acintya) (26.68–71).⁴⁹³

Vipāka is declared to be stronger than rasa, vīrya overcomes vipāka, and prabhāva is even stronger than vīrya (26.72).⁴⁹⁴

Actions of the tastes are mentioned again (26.74–79).⁴⁹⁵

After this long exposition of Ātreya, Agniveśa asks him to give an account of disagreeing (vairodhika) articles of food.⁴⁹⁶ Ātreya, complying with this request, says that substances may be antagonistic to constituents (dhātu) of the body due to their properties, combination, processing, nature (svabhāva), etc. As an example he mentions the combination of fish and milk. Bhadrakāpya objects, asserting that milk may freely be taken together with fish, the fish called cilicima excepted (26.80–83).⁴⁹⁷

A long exposition by Ātreya on numerous antagonistic articles of diet (26.84),⁴⁹⁸ types of antagonism (26.86–101),⁴⁹⁹ bad effects of antagonistic foods, and the treatment of disorders resulting from disregarding the rules (26.102–106), is found at the end of the chapter.

Chapter twenty-seven, called annapānavidhi,⁵⁰⁰ is concerned with articles of diet (anapāna) and describes their medicinal properties and actions.

The foods and drinks are divided into the following groups:⁵⁰¹ sūkadhānya (awned cereals; 27.8–22);⁵⁰² śamīdhānya (pulse; 27.23–34);⁵⁰³ māṃsa (meat; 27.35–87);⁵⁰⁴ śāka (vegetables; 27.88cd–124);⁵⁰⁵ phala (fruits; 27.125–165);⁵⁰⁶ harita (vegetables used in salads; 27.166–177);⁵⁰⁷ madya (alcoholic drinks; 27.178–195);⁵⁰⁸ jala (water; 27.196–216);⁵⁰⁹ gorasa (milk and milk products; 27.217–236);⁵¹⁰ ikṣu (the sugarcane and its products; 27.237–242);⁵¹¹ honey⁵¹² and a disorder caused by honey (madhvā-

tients exhibiting such signs are therefore called puṣpita.¹⁸

Ariṣṭas relating to the smell emitted by a patient's body are described (2.8–16),¹⁹ followed by those relating to its taste, as may be deduced from its attractiveness to various kinds of insects (2.17–22).

Chapter three, called parimarśanīya, is about fatal signs to be ascertained by means of palpation (parimarśana, sparśa), followed by some other categories of ariṣṭas.

Rules for palpation and inauspicious abnormalities found by means of this procedure are described (3.4–5).²⁰

The physician should also examine the patient's way of breathing (ucchvāsa), the region of the carotid arteries (manyā), the teeth, eyelashes, eyes, hair of the head and body, belly, nails and fingers. Fatal signs relating to breathing and signs occurring in the mentioned parts of the body are described (3.6).

Chapter four, called indriyānīka,²¹ is concerned with ariṣṭas pertaining to the functions of the senses; this category has to be determined by means of inference (anumāna) (4.3–4).²² Many fatal signs of this type are described.²³

Chapter five, called pūrvarūpīya,²⁴ deals with fatal prodromes (pūrvarūpa).²⁵ In general, presence of the complete set of prodromes of a particular disease indicates a fatal outcome (5.3–5). Prodromes, pointing to the severe character of a series of particular diseases, are described. Dreams (svapna) form a conspicuous element among these fatal signs (5.6–25).²⁶

Numerous dreams auguring imminent death or great anguish (dāruṇāḥ svapnāḥ) are described (5.27–39).²⁷ Healthy persons, having the same dreams, may sometimes escape this fate (5.40). The dāruṇa dreams are explained as having an organic basis (5.40–41).²⁸

Seven types of dreams are distinguished: based on visual perceptions (dr̥ṣṭa), based on auditory perceptions (śrūta), perceptions by other senses (anubhūta),²⁹ based on wishes (prārthita), based on imagination (kalpita), pointing to future events (bhāvika), and based on disturbances of the doṣas (doṣaja) (5.43). The first five types have no effects (aphala);³⁰ the same applies to dreams experienced during day-sleep and to those which are very short or very long³¹ (5.44).³² Dreams occurring during the first part of the night have weak results (5.45ab).³³ The effect of a dream becomes operative at once if one does not sleep again after dreaming it (5.45cd).³⁴ The prognostic meaning of an inauspicious dream is annulled when it is followed by one to be regarded as auspicious (5.46).³⁵

Chapter six, called katamāniśārīya, describes signs which should make the physician decide to give up treatment.³⁶

Chapter seven, called pannarūpīya,³⁷ deals with the prognostic significance of a patient's chāyā, praticchāyā and prabhā (7.3–17), followed by various ariṣṭas (7.18–31).

Individuals are of three types according to their measurement: short, medium

(9.89cd–94);²⁷⁷ treatment of unmāda in the same way as apasmāra (9.95);²⁷⁸ the prevention of unmāda (9.96); the signs indicating recovery (9.97).

Recipes provided with a name are: kalyāṇakaghṛta (9.33cd–42ab),²⁷⁹ mahākalyāṇakaghṛta (9.42cd–44),²⁸⁰ mahāpaiśācīkaghṛta (9.45–48),²⁸¹ laśunādyaghṛta (9.49–51), and a second laśunādyaghṛta (9.52–56).²⁸²

Chapter ten, on apasmāra (epilepsy), deals with: a definition of this disease (10.3);²⁸³ its aetiology (10.4–5) and pathogenesis (10.6–8ab);²⁸⁴ the four types of apasmāra: caused by vāta, pitta, kapha and saṁnipāta; their symptoms²⁸⁵ and degrees of curability; the intervals between the attacks (10.8cd–13); treatment of apasmāra (10.14–52);²⁸⁶ apasmāra, in which an āgantū factor is secondarily (as an anubandha) involved,²⁸⁷ added to the doṣic aetiology, should be treated in the same way as the āgantū type of unmāda (10.53); the aetiology, pathogenesis (saṁprāpti), symptomatology and therapy of the major disease (mahāgada) called atattvābhiniṣeṣa (10.54–63);²⁸⁸ the treatment of chronic (cīrakārin) epilepsy which has acquired a firm footing (kṛtāspada) (10.64–65); precautions to be taken by a patient suffering from apasmāra (10.66).

Recipes provided with a name are: pañcagavyaghṛta (10.16–17)²⁸⁹ and mahāpañcagavyaghṛta (10.18–24).²⁹⁰

Chapter eleven is concerned with kṣataḥkṣāṇa (injury to the chest and its effects).²⁹¹

The subjects dealt with are: the aetiology of this disease (11.4–8); its pathogenesis; kṣata (injury) of the chest leads to kṣaya (wasting), due to deficiency of śukra and ojas (11.9–12ab); the prodromes²⁹² and symptoms (11.12cd–13); the degrees of curability (11.14); treatment (11.15–95).

Recipes provided with a name are: elādiguṭikā (11.21–24),²⁹³ amṛtaprāśaghṛta (11.35–43),²⁹⁴ śvadamṣṭrādighṛta (11.44–47), five varieties of sarpiṅgūda (11.50–55, 56–61, 62–65, 66–69, 70–77),²⁹⁵ saindhavādicūrṇa (11.85–87), and śāḍava (11.88–90).

Chapter twelve is about śvayathu (swelling).²⁹⁶

It deals with the following subjects: the classification of the types of this disorder: caused by vāta, pitta and kapha, nija and anija (= āgantū), localized (ekāṅgaja) and generalized (sarvaja)²⁹⁷ (12.4);²⁹⁸ the aetiology of the nija and āgantū types (12.5–7ab);²⁹⁹ three varieties of the nija and āgantū types according to their seat: the whole body, half of it, or part of it (12.7cd); the saṁprāpti of śvayathu (12.8); śvayathu occurring in the upper (ūrdhvaga), lower (adhoga) and middle part (madhyaga) of the body, śvayathu of the whole body (sarvāṅgaga), and localized forms, called after the part affected (12.9); the prodromes (12.10ab); all varieties of śvayathu are caused by the three concerted doṣas, but they are designated after the predominant doṣa and treated accordingly (12.10cd); the symptoms of śvayathu in general (12.11); the symptoms of śvayathu with a predominance of vāta (12.12), pitta (12.13) and kapha (12.14);³⁰⁰ six fatal complications (12.15);³⁰¹ signs indicating curability (12.16ab); the treatment of śvayathu³⁰² (12.16cd–73).³⁰³

of rakta is bile (pitta); the waste products of māṁsa consist of the impurities of the bodily orifices; the waste product of medas is sweat (sveda), of asthi the hairs of head (keśa) and body (loman), of majjā the fatty substance (sneha) of eyes, faeces and skin; these substances support (upasaṁstambha) each other and maintain the body (15.18–19).

The intake of aphrodisiacs (vṛṣya) accelerates the processes described. Some are of the opinion that the process of conversion of the bodily elements (parivartana) is completed in a period of six days; however, the transformational processes (parivṛtti) take place continually in a cyclic way (cakravat) (15.20–21).³⁹⁷

On the request of his pupil, Ātreya explains the changes of the properties of the bodily elements in the course of the transformational processes (15.22–35).³⁹⁸

The vyāna disperses the element rasa continually throughout the body; a local morbid alteration (vikṛti) appears if this moving about of rasa is blocked at a particular place due to pathological changes of channels (khavaiguṇya); the doṣas are subsequently excited at that very place (15.36–38ab).

The digestive fire is the chief one (adhipa) among all the bodily fires (paktar), which are dependent on it. For this reason it should be carefully protected, since, otherwise, grahaṇīdoṣa may develop (15.38cd–41).

The aetiology of disorders of the digestive fire (agnidoṣa) is described,³⁹⁹ followed by their symptoms, in combination with excitation of one of the three doṣas (15.42–49).

The actions on the dhātus of a normal digestive fire and of a disordered fire are described (15.50–51ab).

A weak digestive fire leads to incomplete digestion (vidāha) of the ingested food, which then moves upwards or downwards; the disorder is called grahaṇīgada if it moves downwards. The symptoms are described, followed by the prodromes (15.51cd–55).⁴⁰⁰

The grahaṇī and its functions are dealt with (15.56–57).⁴⁰¹

The aetiology and symptomatology of grahaṇīdoṣa caused by vāta, pitta, kapha and saṁnipāta are discussed.⁴⁰² The three disorders of the digestive fire mentioned in the rogāṇīka chapter⁴⁰³ are included under the heading of grahaṇīdoṣa (15.58–72).

The remaining part of the chapter is devoted to the treatment of grahaṇīdoṣa⁴⁰⁴ and agnidoṣa (15.73–243).

Recipes provided with a name are: daśamūlādyaghṛta (15.82–86),⁴⁰⁵ tryūṣaṇādyaghṛta (15.87),⁴⁰⁶ pañcamūlādyaghṛta and -cūrṇa (15.88–93), citrakādyaguṭikā (15.96–97), maricādyacūrṇa (15.98–110),⁴⁰⁷ takrāriṣṭa (15.117cd–121),⁴⁰⁸ candanādyaghṛta (15.125–128), nāgarādyacūrṇa (15.129–131),⁴⁰⁹ bhūnimbādyacūrṇa (15.132–133), kirātādyacūrṇa (15.134–140),⁴¹⁰ madhūkāsava (15.146–149),⁴¹¹ durālabhāsava (15.152–155),⁴¹² mūlāsava (15.156–159), piṇḍāsava (15.160–162), madhvariṣṭa (15.163–167), ṣaṭpalaghṛta (15.168–170),⁴¹³ kṣāraghṛta (15.171–172),⁴¹⁴ and several kinds of kṣāra (15.177–193).

Chapter sixteen is concerned with pāṇḍuroga (morbid pallor and related disorders).⁴¹⁵

Subjects dealt with are: the five types of pāṇḍuroga, caused respectively by vāta, pitta, kapha, saṁnipāta and the eating of earth (mṛdbhakṣaṇa)⁴¹⁶ (16.3),⁴¹⁷

quickly as possible (17.68cd–69).

The remaining part of the chapter (17.70–151)⁴⁶³ is devoted to treatment⁴⁶⁴ (17.68–150).⁴⁶⁵

Recipes provided with a name are: muktādyacūrṇa (17.125–128), tejovatyādighṛta (17.141cd–144),⁴⁶⁶ and manaḥśilādighṛta (17.145–146).

Chapter eighteen is concerned with kāsa (cough).⁴⁶⁷

Its subjects are: the five types of kāsa: three types caused by the doṣas, one caused by a trauma (kṣata), and one caused by wasting (kṣaya);⁴⁶⁸ they lead to wasting when they are progressive (18.3–4); the prodromes (18.5);⁴⁶⁹ the saṃprāpti (18.6–8);⁴⁷⁰ the causes of the specific characteristics (18.9); the aetiology and symptomatology of kāsa brought about by vāta (18.10–13),⁴⁷¹ pitta (18.14–16),⁴⁷² kapha (18.17–19),⁴⁷³ injury to the chest (urahkṣata) (18.20–23),⁴⁷⁴ and wasting (18.24–29a);⁴⁷⁵ kāsa due to wasting is fatal in wasted (kṣīṇa) patients, but curable in strong ones; kāsa of traumatic origin is palliable in strong patients; both types are sometimes curable if they are of recent origin and correctly treated; kāsa appearing in old age (jarākāsa) is palliable (18.29–30).⁴⁷⁶

The remaining part of the chapter is devoted to treatment⁴⁷⁷ (18.31–190).⁴⁷⁸

Recipes provided with a name are: kaṇṭakārighṛta (18.35),⁴⁷⁹ pippalyādighṛta (18.36–38),⁴⁸⁰ tryūṣaṇādyagṛta (18.39–42),⁴⁸¹ rāsnāghṛta (18.43–46),⁴⁸² citrakā-dileha (18.53–56), agastyaharītakī (18.57–62),⁴⁸³ daśamūlādighṛta (18.123–124),⁴⁸⁴ a second kaṇṭakārighṛta (18.125–128), kulathādighṛta (18.129),⁴⁸⁵ dvipaṇcamūlādighṛta (18.158–160), guḍūcyādighṛta (18.161–162),⁴⁸⁶ harītakīleha (18.168–169), and padmakādileha (18.174–175).⁴⁸⁷

Chapter nineteen gives an exposition on atisāra (diarrhoea).⁴⁸⁸

It begins with a story on the first appearance⁴⁸⁹ of this disease. During the first age of the world (ādikāla) the sacrificial animals were not killed, but only taken hold of. Later, after Dakṣa's sacrifice,⁴⁹⁰ the animals began to be consecrated (prokṣaṇa)⁴⁹¹ with their own consent (abhyanuñjāna), in the sacrificial rites (kratu) of the sons of (Vaivasvata) Manu, called Narisyaṇt, Nābhāga, Ikṣvāku, Nṛga, Śaryāti,⁴⁹² etc. Still later, Pṛṣadhra⁴⁹³ started sacrificing cattle, because other animals were not available for his prolonged soma ritual (dīrghasattra).⁴⁹⁴ This made all creatures grief-stricken, and, when the meat of these cattle was consumed, all creatures began, because of their mental affliction and, consequently, by an impaired digestive fire, to suffer from diarrhoea, due to the properties of this inauspicious (aśasta) food (19.4).

The chapter proceeds with: the description of the aetiology⁴⁹⁵ and symptomatology of atisāra caused by vāta (19.5), pitta (19.6), kapha (19.7);⁴⁹⁶ two saṃnipāta types of atisāra⁴⁹⁷; degrees of curability⁴⁹⁸ (19.8–10); atisāra due to fear (bhaya)⁴⁹⁹ and grief (śoka);⁵⁰⁰ the last two types, of a mental and exogenous nature, present the same symptoms as atisāra caused by vāta (19.11).⁵⁰¹

The remaining part of the chapter is devoted to the treatment of the curable kinds of the six types of atisāra⁵⁰² (19.12–122).⁵⁰³ A recipe called cāṅgerighṛta is mentioned (19.43).⁵⁰⁴

enumerated, followed by the characteristics of persons who are bitten by these three kinds,⁵⁸⁴ by a pregnant (garbhīṇī) snake,⁵⁸⁵ and by one who has given birth (sūtā);⁵⁸⁶ a four-footed snake, born from a godhā, is called a gaudheyaka and resembles a black snake (kṛṣṇasarpa);⁵⁸⁷ several other crossbreeds (miśrajāti) are known;⁵⁸⁸ the characteristics of serious (bhṛṣābādha) and less serious bites (23.130–135); the black snake when young, the gonasa⁵⁸⁹ of advanced age, and the adult rājīmant are like āśīviṣa (23.136);⁵⁹⁰ the four fangs of venomous snakes, their colours, the quantity of poison they contain (23.137–139); the two kinds of poisonous kīṭas,⁵⁹¹ arising from the faeces and urine of snakes: those containing dūṣīviṣa (slowly acting poison) and those containing prāṇahara (deadly) poison; the characteristics of the bites of these kīṭas and the symptoms produced (23.140–143); the signs and symptoms of a bite by a dūṣīviṣa spider (lūtā) and of spiders in general (23.144–146);⁵⁹² the signs and symptoms of bites and stings by a rat (ākhū, mūṣika),⁵⁹³ lizard (kṛkalāsaka),⁵⁹⁴ scorpion (vṛścika),⁵⁹⁵ kaṇabha,⁵⁹⁶ uccīṭiṅga,⁵⁹⁷ frog or toad (maṇḍūka),⁵⁹⁸ fish (matsya), leech (jalaukas),⁵⁹⁹ gecko (grhagadhikā),⁶⁰⁰ centipede (śatapadī),⁶⁰¹ gnat (maśaka),⁶⁰² fly or bee (makṣikā),⁶⁰³ and sthagikā⁶⁰⁴ (23.147–158); bites leading to death (23.159–161ab);⁶⁰⁵ factors aggravating the effect of poison (23.162); snakes whose venom has a mild effect (23.163);⁶⁰⁶ anger is the releasing factor of venom in snakes (23.164);⁶⁰⁷ vāta predominates in the poison of uccīṭiṅga and scorpion, vāta and pitta in that of kīṭas, kapha in that of the kaṇabha, etc.; treatment should consist of the prescription of substances counteracting these doṣas (23.165–166); the symptoms produced by a poison in which respectively vāta, pitta or kapha predominates (23.167–169); treatment of the bites and stings mentioned (23.170–174);⁶⁰⁸ the bite of a dog excites the three doṣas and corrupts the bodily elements; the symptoms of a dogbite;⁶⁰⁹ the bites of other fierce animals (vyāla); poisonous and non-poisonous bites (23.175–178); treatment of diverse kinds of poisoning⁶¹⁰ (23.179–249);⁶¹¹ the section on treatment mentions a poisonous animal called viśvambhara (23.214);⁶¹² the condition called śaṅkāviṣa, i.e., the anxiety of someone who thinks to have been bitten (by a snake), is described, as well as its treatment (23.221–223);⁶¹³ things wholesome and wholesome to victims of poisoning (23.224–228);⁶¹⁴ the symptoms of poisoning by quadrupeds and its treatment (23.229–232); gara, prepared and administered mixed with food by women afraid to lose the favour of their husband or lover, is also dealt with, followed by the treatment of the victim (23.233–240).⁶¹⁵

The chapter ends with measures to be taken immediately after a bite (23.250–253)⁶¹⁶ and a concluding verse (23.254.)

Recipes with a name are pañcaśīrṣāgada (23.212–218)⁶¹⁷ and amṛtagṛta (23.242cd–249).⁶¹⁸

Chapter twenty-four is about madātyaya (alcoholism and its complications).⁶¹⁹

Its subjects are: the eulogy of surā,⁶²⁰ honoured by gods and sages, used as an oblation in the sautrāmaṇī ritual,⁶²¹ etc.; the advice to use it properly (24.3–10); the proper way in general of consuming alcoholic drinks (madya) (24.11–20);⁶²² special prescriptions⁶²³ for persons with a vātika, paittika or ślaiṣmika constitution (24.21–23),⁶²⁴ applicable to those who are wealthy or on the path to prosperity (24.24);

gaṇḍika⁶²⁵ and paṣṭika⁶²⁶ drinks are suitable to those with a vātika constitution, mārḍvika⁶²⁷ is suitable to a paittika, mādava⁶²⁸ to a ślaishmika constitution (24.25); the properties and actions of alcoholic drinks made from many different substances (24.26–28); alcoholic drinks, after reaching the heart, disturb the ten properties of ojas by their own ten qualities, thus causing mental disorder (24.29); the ten properties of alcoholic drinks are: laghu (light), uṣṇa (hot), tīkṣṇa (sharp), sūkṣma (subtle), amla (sour), vyavāyin (relaxation-promoting), āsuga (quickly acting), rūkṣa (dry), vikāśin (diffusive), and viśada (clear); the ten properties of ojas are: guru (heavy), śīta (cold), mṛdu (soft), ślakṣṇa (smooth), bahala (gross),⁶²⁹ madhura (sweet), sthira (immovable), prasanna (slowly acting), picchila (mucilaginous), and snigdha (oleaginous); the properties of an alcoholic drink counteract those of ojas in the following way: laghu is contrary to guru, uṣṇa to śīta, amla to madhura, tīkṣṇa to mṛdu, āsuga to prasanna, rūkṣa to snigdha, vyavāyin to sthira, vikāśin to ślakṣṇa, viśada to picchila, sūkṣma to sāndra,⁶³⁰ thus sattva, residing there (i.e., in the seat of ojas, the heart), is quickly disturbed and brings about mada (intoxication) (24.30–34);⁶³¹ the heart is the seat of the channels (mārga) transporting rasa, vāta, etc., as well as the seat of sattva, buddhi, the senses, and the primary ojas;⁶³² for that reason the heart, and the dhātus located there, are pathologically changed by the immoderate use of alcoholic drinks and the damage of ojas resulting therefrom (24.35–36);⁶³³ the first stage of intoxication⁶³⁴ is characterized by stimulation (pratibodhita) of the heart, without any damage (avihata) to the ojas; the ojas is slightly damaged in the second stage, more seriously so in the third stage; a paṣṭika alcoholic drink does not cause damage to the ojas, because the properties vikāśin, rūkṣa and viśada are not predominant in it (24.37–38); alcoholic drinks produce mental changes (vikāra) of a rājasa and tāmasa character, culminating in confusion and sleep when used in excess; this pathological state caused by alcohol (madyavibhrama) is called mada (intoxication) (24.39–40); three stages (prathama, madhyama, antya or uttama) of intoxication are described; a special variety, between the second and third stages, occurring in those of a rājasa or tāmasa character, is added (24.41–51);⁶³⁵ the dangers of the improper and immoderate use of alcohol,⁶³⁶ and its merits as a medicinal substance (24.52–60); the beneficial effects of alcohol (24.61–67);⁶³⁷ alcoholic drinks are harmless when one pays due regard to the three types of foods, to drinks, age, disorders (vyādhi), strength, time, doṣa and character (sattva); this correct use is called yukti; a person with a sāttvika character may enjoy all the merits of alcohol (24.68–70); the mind (sattva) is stimulated in the first stage of mada, it loses its lucidity in the second stage, extremely so in the third stage; alcohol exposes the qualities of one's character, as fire exposes the qualities of gold (24.71–73); the sāttvika, rājasa and tāmasa ways of enjoying drinks (āpāna) (24.74–79); circumstances which make drinking for particular types of persons into a pleasant activity; persons who get drunk by a small quantity of alcohol (24.80–87); the aetiology and symptomatology of madātyaya dominated by vāta, pitta, kapha, and the three doṣas (24.88–100);⁶³⁸ the general symptoms of madātyaya (24.101–106); general principles regarding the treatment of madātyaya; kapha is to be counteracted first, pitta and vāta being secondarily involved; a disorder caused by a particular alcoholic beverage is alleviated by the administration of the same drink⁶³⁹

the list (26.117cd).

Five types of śīroroga (diseases of the head) are described: caused by vāta, pitta, kapha, saṁnipāta, and parasites (krimi) (26.118).⁷⁴⁶

Four types of mukharoga (diseases of the oral cavity) are described: caused by vāta, pitta, kapha, and saṁnipāta (26.119–122ab);⁷⁴⁷ their number is sixty-four⁷⁴⁸ with regard to their location (saṁsthāna), corruptible element(s) affected (dūṣya), symptoms (ākṛti),⁷⁴⁹ and name; the aetiology, symptomatology and treatment of these sixty-four diseases are discussed in surgical textbooks (śālākyaśāstra); the treatment of the four types mentioned will be described in the present treatise (26.122cd–123).⁷⁵⁰

Arocaka (anorexia) is of several types.⁷⁵¹ The symptoms of this disease, when caused by vāta, pitta and kapha, are described. Loss of appetite is the only symptom of the psychogenic varieties, brought about by grief, anxiety, greed, anger, disgusting smells, and foods which are disgusting to look at (26.124–126).⁷⁵²

Four types of karnaroga (ear disease) are described: caused by vāta, pitta, kapha and all three doṣas (26.127–128).⁷⁵³

Four types of netraroga (eye disease) are described: caused by vāta, pitta, kapha and all three doṣas; the treatises on śālākya deal with ninety-six of these diseases; the present treatise does not attempt to discuss them, because they belong to the domain of others (parādhikāra) (26.129–131).⁷⁵⁴

Khalati (baldness) arises when the bodily heat (tejas), together with vāta, etc., burns the scalp (keśabhūmi); when this action is mild, the hair turns grey (palita) or brown (hariprabhatva) (26.132).⁷⁵⁵

The diseases of the supraclavicular region (ūrdhvajatrūthagada) have partially been described now in order to fill up a lacuna (aśūnyatārtha) (26.133ab).⁷⁵⁶

The remaining part of the chapter is devoted to the treatment of pratiśyāya, pīnasa, and other diseases of the nose (26.134–157),⁷⁵⁷ diseases of the head (26.158–186),⁷⁵⁸ diseases of the teeth, oral cavity and throat (26.187–214),⁷⁵⁹ arocaka (26.215–220),⁷⁶⁰ diseases of the ears (26.221–230),⁷⁶¹ diseases of the eyes (26.231–262ab),⁷⁶² baldness,⁷⁶³ greying of the hair, wrinkles, etc. (26.262cd–282),⁷⁶⁴ and the five types of svarabheda (disorders of the voice): caused by vāta, pitta, kapha, blood, and saṁnipāta (26.283–290).⁷⁶⁵

Recipes with a name are: aṇutaila (26.239–241ab),⁷⁶⁶ māyūraghṛta (26.158–165),⁷⁶⁷ mahāmāyūraghṛta (26.166–174),⁷⁶⁸ kālākacūrṇa (26.194cd–196ab),⁷⁶⁹ pītakacūrṇa (26.196cd–198ab),⁷⁷⁰ khadirādiguṇikā and -taila (26.206–214), sukhāvatī varti (26.252–253),⁷⁷¹ dṛṣṭipradā varti (26.254–256ab),⁷⁷² and mahānīlataila (26.268cd–276ab).⁷⁷³

Chapter twenty-seven, on ūrustambha,⁷⁷⁴ begins with Agniveśa asking his teacher whether there is a disease not amenable to treatment by means of pañcakarma and nevertheless curable. Ātreya replies that ūrustambha is such a disease (27.3–7).

The aetiology, pathogenesis, symptoms and prodromes of this disease are described; when āma (undigested matter), which has accumulated in the viscera, has, together with medas, obstructed vāta and the other doṣas, it descends, owing to its heaviness, to the thighs (ūru) and lower parts of the legs, impairing their mobility;

(vyakta) signs are the specific symptoms (ātmārūpa), while slight signs indicate subsidence (apāya) of the disease (28.19cd–20ab).

The general symptoms of excited vāta are enumerated (28.20cd–23). Peculiarities concerning cause(s) and location lead to particularities of the diseases which arise (28.24ab).

The symptoms of the disorders which appear when corrupted vāta has become lodged in a particular part or constituent of the body, or the whole body, are dealt with in the next section. The parts mentioned are: the viscera (koṣṭha), the whole body, ano-rectal region (guda), receptacle of undigested food (āmāśaya),⁷⁸³ receptacle of digested food (pakvāśaya),⁷⁸⁴ sense organs (indriya),⁷⁸⁵ skin (tvac),⁷⁸⁶ blood (rakta), muscular and fatty tissues (māmsa and medas), bones and bone marrow (asthi and majjā), semen (śukra), cords (snāyu), vessels (sirā), and junctures (sandhi)⁷⁸⁷ (28.24cd–37).

Several specific diseases are described in the section that follows. These diseases are: arditā (facial paresis) (28.38–42),⁷⁸⁸ manyāstambha (28.43a–c),⁷⁸⁹ antarāyāma (28.43d–45c),⁷⁹⁰ dhanuṣṭambha or bahirāyama (28.45d–48),⁷⁹¹ hanugraha (lockjaw) (28.49–50ab),⁷⁹² ākṣepaka (convulsions) (28.50cd–51ab),⁷⁹³ daṇḍaka (28.51cd–52ab),⁷⁹⁴ curable and incurable forms of the diseases mentioned (ardita up to daṇḍaka) (28.52cd–53ab), pakṣavādha (hemiplegia) (28.53cd–54),⁷⁹⁵ ekāṅgaroga (paresis or paralysis of one limb)⁷⁹⁶ and sarvāṅgaroga (tetraplegia) (28.55),⁷⁹⁷ grdhrasī (sciatica) and its two varieties (28.56–57ab),⁷⁹⁸ and khallī (28.57cd).⁷⁹⁹

The remaining disorders should be known from the signs characteristic of the seat (of vāta) (28.58ab); the combination of vāta with pitta, etc., should also be taken into consideration (28.58cd).

Excitation of vāta comes about through deficiency of dhātus and obstruction of pathways (mārgāvaraṇa);⁸⁰⁰ vāta, pitta and kapha move through all the channels; only vāta, due to its subtleness, is able to make the other two move about; when excited, it agitates the other two, hurling them to various places, where, due to this, diseases appear, brought about by pathways which are obstructed, thus leading to drying up of rasa, etc. (28.59–61ab).⁸⁰¹

The symptoms of the disorders are described which are the result of vāta being obstructed (or: covered, āvṛta) by pitta, kapha, blood, muscular tissue, fatty tissue,⁸⁰² bone tissue, bone marrow, semen, food (anna), urine or faeces (28.61cd–72ab).⁸⁰³

Curable with difficulty or incurable are, due to their deep-seatedness: luxation of joints (sandhicyuti),⁸⁰⁴ lockjaw (hanuṣṭambha), contractures (kuñcana),⁸⁰⁵ kyphoscoliosis (kubjātā),⁸⁰⁶ arditā, hemiplegia (pakṣāghāta),⁸⁰⁷ desiccation (saṁśoṣa)⁸⁰⁸ of parts of the body,⁸⁰⁹ paṅgutva,⁸¹⁰ kṣudhāvātā,⁸¹¹ stambhana,⁸¹² ādhyavāta,⁸¹³ and the diseases caused by vāta when lodged in bones or bone marrow. These diseases may be treated when of recent origin, free from complications, and occurring in strong patients (28.72cd–74).⁸¹⁴

The treatment of the diseases described is discussed⁸¹⁵ (28.75–198).⁸¹⁶ Additional disorders referred to are: desiccation of a foetus (28.95) and of young children (28.95), vāta lodged in the cardiac region (28.96), umbilical region (28.97), arms (28.98) and head (28.98).

one in tuṣodaka (12.35ab), one kind of surā (12.35cd),¹⁰¹ one in a kaṣāya of kampillaka (12.35cd),¹⁰² and five in a ghee.¹⁰³

Three hundred and fifty-five emetic and two hundred and forty-five purgative preparations have thus been described, making a total of six hundred; all these preparations are mainly based on fifteen drugs (12.41–42).

The remaining part of the chapter is devoted to a number of interconnected subjects.

Some verses deal with general principles relating to compound recipes, the interaction of drugs, their potentiation (balādhāna), etc. (12.43–50).¹⁰⁴

The next group of verses (12.51–86) is concerned with general rules relating to the treatment of patients with emetic and purgative measures. These evacuative measures are of three types: drastic (ūkṣṇa), of medium strength (madhya), and mild (mr̥du) (12.51–57). Diseases are of three types too: severe (ūkṣṇa), of medium strength (madhya), and mild (mr̥du), according to the number of symptoms present (12.58).

Dosages are important in this context, which explains that the units of weight (māna, pramāṇa, parimāṇa) are discussed (12.87–97): 6 dhvamsī¹⁰⁵ = 1 marīci; 6 marīci = 1 sarṣapa; 8 (rakta)sarṣapa = 1 taṇḍula;¹⁰⁶ 2 taṇḍula = 1 dhānyamāsa; 2 dhānyamāsa = 1 yava;¹⁰⁷ 4 yava = 1 aṇḍikā; 4 aṇḍikā = 1 māśaka,¹⁰⁸ also called hema and dhānyaka; 3 māśaka = 1 śāṇa; 2 śāṇa = 1 drankṣaṇa, also called kola and badara; 2 drankṣaṇa = 1 karṣa,¹⁰⁹ also called suvarṇa, akṣa, biḍālapadaka, picu, pāṇitala, tinduka, and kavala-graha; 2 karṣa = 1 palārdha (half a pala), which is also called śukti and aṣṭamikā; 2 palārdha = 1 pala,¹¹⁰ also called muṣṭi,¹¹¹ prakūñca, caturthikā, bilva, ṣoḍaśikā, and āmra; 2 pala = 1 prasṛta,¹¹² also called aṣṭamāna; 4 pala = 1 añjali,¹¹³ also called kuḍava;¹¹⁴ 2 kuḍava = 1 mānikā; 4 kuḍava = 1 prastha;¹¹⁵ 4 prastha = 1 āḍhaka,¹¹⁶ also known as pātra; 8 prastha = 1 karṣa; 4 karṣa = 1 droṇa.¹¹⁷ also called armaṇa, nalvaṇa, kalaśa, ghaṭa, and unmāna; 2 droṇa = 1 śūrpa or kumbha; 2 śūrpa = 1 goṇī, also called khārī¹¹⁸ and bhāra;¹¹⁹ 32 śūrpa = 1 vāha; 100 pala = 1 tulā.¹²⁰

Rules are given for the dosages of fresh and dried medicinal substances,¹²¹ the ratios of liquids in relation to the drugs in a compound recipe, etc. (12.98–101).¹²² The preparation of fat-containing compound drugs (oils, ghees) is described; this so-called snehapāka is of three types: mr̥du (mild), madhya (medium), and khara (firm), according to the consistency of the final product; the indications of these three products of snehapāka are mentioned (12.102–104).¹²³

The two systems of weights and measures which are employed in medicine are referred to in a verse considered to be spurious (anārṣa) by Cakrapāṇi; the Māgadha system is said to be superior to the Kāliṅga system (12.105).¹²⁴

makes the fixed (sthira) doṣas flow out (viṣyandayati) of the body after application of sneha, as fire acts upon damp wood; śodhana (purification) eliminates the impurities (mala = doṣa), as dirt is removed from a cloth by water (6.11–13); a purificatory drug should not be taken during a disorder of digestion (ajīrṇa) (6.14); characteristics of a proper dose (6.15–17); the preparatory diet (6.18–19ab); the signs of proper elimination (6.19cd–20); removal of the remains of too large a dose (6.21–22ab);³³ the treatment to be applied when the signs of proper digestion of the drug are not observed (6.23); after-treatment (6.24); the treatment to be applied when kapha and pitta are only slightly eliminated (6.25);³⁴ signs indicating proper and improper digestion of the drug (6.26–27); types of improper administration (6.28); ten disorders (vyāpad) due to improper purification are enumerated:³⁵ ādhmāna (tympanitis), parikarti,³⁶ srāva,³⁷ hr̥dgraha,³⁸ gātragraha,³⁹ jīvādāna (bleeding), vibhramśa,⁴⁰ stambha (stiffness), upadrava (complications), and klama (exhaustion) (6.29–30); cases of wrong application of purificatory measures and their treatment (6.31–57);⁴¹ the symptoms and treatment of ādhmāna (6.58–60),⁴² parikartikā (6.61–67),⁴³ parisrāva (6.68–70),⁴⁴ hr̥dgraha (6.71–75),⁴⁵ aṅgagraha (= gātragraha) (6.76–77), jīvādāna (6.78–84),⁴⁶ the three types of vibhramśa: gudabhramśa (prolapse of the rectum), samjīñāṇśa (loss of consciousness), and a syndrome characterized by kaṇḍū (itching) and other signs (6.85–87), stambha (6.88–89),⁴⁷ upadrava (6.90–91),⁴⁸ and klama (6.92–93).⁴⁹

Chapter seven, called bastivyāpatsiddhi, deals with the disorders caused by the improper administration of enemas.

Twelve of these disorders (vyāpad) are enumerated: deficient application (ayoga), over-application (atiyoga), klama (exhaustion),⁵⁰ ādhmāna (tympanitis), hikkā (hiccup), hr̥tprāpti,⁵¹ ūrdhvatā (moving in an upward direction),⁵² pravāhikā,⁵³ śiro'rti (headache), aṅgārti (pains in the whole body), parikarta,⁵⁴ and parisrava⁵⁵ (7.5–6).

The causes, symptoms and treatment of these disorders are described: ayoga (7.7–11), atiyoga (7.12–14), klama, due to a remnant of āmadoṣa (7.15–20),⁵⁶ ādhmāna (7.21–26),⁵⁷ hikkā (7.27–29), hr̥dayaghaṭṭana (= hr̥tprāpti; 7.30–31), ūrdhvatā (7.32–39), pravāhikā (7.40–42),⁵⁸ śiro'rti (7.43–46), aṅgārti (7.47–53), parikartikā (7.54–57), parisrava (7.58–62).⁵⁹ The composition of drastic (tikṣṇa) and mild (mr̥du) enemas is dealt with (7.63).

The chapter ends with some general statements on the action of enemas (7.64–65).

Chapter eight, called prāśṭayogīyasiddhi, begins with a number of formulations (yoga) for enemas, expressed in the unit of weight called prasṭa.⁶⁰ These enemas are especially suitable to delicate (sukumāra) patients and those suffering from the bad effects of improperly applied evacuative measures (8.3–18).⁶¹

One of the formulations is called pañcatiktanirūha (8.8–9ab).⁶²

The second part deals with diarrhoea (atisāra) as a disorder arising from the injudicious administration of enemas. Six main types are distinguished: accompanied by āma, or pakva (i.e., devoid of āma) and accompanied by faeces, vāta, blood, pitta or kapha; thirty subtypes are distinguished according to the combinations of doṣas involved. This diarrhoea may lead to various complications (upadrava), such as śūla

sthāvarajātānām snehānām); 25.39 (ālukaṃ kandānām should precede nikucam phalānām); 25.40 (lāmajjakoṣīre is preferable to lāmajjakoṣīram and nirvṛtīḥ puṣṭikarāṇām to nirvṛtīḥ puṣṭikarāṇām; the second niḥsaṃśayakarāṇām should be replaced by nirbhayakarāṇām); 26.3 (Hiranyākṣa Kuśika should be substituted for Hiranyākṣa Kauśika); 26.43(4) (mohayati instead of mohayanti); 26.84 (sarṣapatailabhṛṣṭān instead of sarṣapatailabhṛṣṭān); 27.4 (vetrāgrāmṛtā instead of vegāgrāmṛtā); 27.25 (sa svāduḥ is preferable to tat svāduḥ);¹²⁸ 27.55 (jaṅgalacārīṇaḥ instead of jāṅgalacārīṇaḥ); 27.92 (kālakhyam instead of kālāyam);¹²⁹ 27.101 (-nālikāsuryaḥ instead of -nālikāsūryaḥ); 27.122 (sarṣapam śākam is odd among the group of kandaśākas);¹³⁰ 27.128 (vātapitte praśasyate is better than vātapitte ca śasyate); 27.163 (madhurāṇy anupākīni instead of madhurāṇy amlapākīni); 27.216 (varuṇālaye instead of varuṇālayam); 28.4 (prasādākhyāḥ malākhyāś ca instead of malākhyāḥ prasādākhyāś ca); Ni.3.10 (sabubhukṣasya instead of abubhukṣasya);¹³¹ Ni.4.14 (iksvālīrasasamkāśa should be read instead of kāṇḍekṣurasasamkāśa);¹³² Vi.3.45 (tīvrādharmarucer instead of tīvrādharmārucer); 4.5 (jñānasamudāyena instead of jñānasamudāyena); 5.8 (arocakāvīpākau instead of arocakavīpākau); 5.26 (annavahānām instead of annavāhānām);¹³³ 7.17 (trirātram instead of trivāram);¹³⁴ 8.11 (mādhukībhir instead of mādhukībhir); 8.109 (śikharidaśanāḥ is preferable to śikharadaśanāḥ);¹³⁵ Śā.1.143 (vratacyopavāśaś ca instead of vratacyopavāśau ca);¹³⁶ Śā.5.4 (ṣaḍdhātavaḥ samuditāḥ loka iti śabdam labhante instead of puruṣa iti śabdam labhante); 8.3 (strīpumsayor avyāpannaśukraṇītagarbhāśayoḥ should be replaced by strīpumsayor avyāpannaśonītagarbhāśayaśukrayoḥ);¹³⁷ 8.24 (viśamāsana should replace viśamāsana); 8.47 (kṣemaka instead of kṣaumaka; kaṇakaṇīkendhana instead of kaṇakakaṇīkendhana);¹³⁸ I.2.19 (kaścid evāśya vairasyam instead of kaścid evāśyavairasyam); 5.17 (piban instead of pibet); I.5.34 (pādavarmaṇoḥ instead of pādacarmaṇoḥ); 11.21 (āhvayantaḥ is preferable to āhvayams tam); 12.19 (varma vicyutam is preferable to carma vicyutam); Ci.1.36b (āmalaḥkeṣv api is better than āmalakīṣv api);¹³⁹ 1.2.15 (aṣṭabhāgena instead of akṣabhāgena);¹⁴⁰ 2.2.8ab (sāndrībhūtam tam kuryāt prabhūtamadhuśarkarāḥ instead of sāndrībhūtam ca kuryāt prabhūtamadhuśarkaram);¹⁴¹ 3.54cd (saptāhaṃ vā daśāhaṃ vā dvādaśāhaṃ suduḥsahaḥ is preferable to daśāhaṃ dvādaśāhaṃ vā saptāhaṃ vā suduḥsahaḥ);¹⁴² 5.77c (śūlānāhaharāḥ instead of śūlānāhaharī); 6.26 (surāhvaṃ instead of surāhvām);¹⁴³ 6.40 (savalkām instead of sakalkām); 7.111 (sailā instead of śailā); 7.120 (rajas instead of payas); 7.123 (pakvasurā is to be replaced by śakrasurā);¹⁴⁴ 7.140 (ardhapalāṃśam is more correct than ardhadalāṃśam); 8.58 (śleśmāśayastham is preferable to āmāśayastham);¹⁴⁵ 9.22 (-pāṇiḥ instead of vāṇiḥ);¹⁴⁶ 13.48 (anudakaprāptam udaram is better than anudakam aprāptam udaram); 13.88–89ab (the correct order is 88ab, 89ab, 88cd); 13.119cd–124ab (iti paṭolādicūrṇam should be inserted after the formula); 14.43 (iṣṭakasya should be replaced by dīpyakasya); 14.228–229 (iti picchābastiḥ should come after 228); 14.243 (śītoṣṇāni ca yojayan instead of yojayet); 14.252 (saśārkārāḥ instead of saśarkārāḥ); 14.253ab (dvaividhyam instead of dvividham); 14.253cd (peyāś ca instead of peṣyāś ca); 15.35 (sthalaṃ nimnam ivodakam is preferable to sthālān nimnād ivodakam); 15.89 (kolāmla instead of kolāmbu); 15.97 (cānalām instead of cālanam); 15.205 (sa ghṛtam instead of saghṛtam); 15, colophon

142; Si.9.51); aśvakhuraka²⁵¹ (Ci.23.245); aśvāvarohikā²⁵² (Si.10.37); atirasā²⁵³ (Sū. 4.10 and 18; Ci.10.35); ātmajā²⁵⁴ (Ci.3.267); avaghāta²⁵⁵ (Ci.7.129); avaghātaka²⁵⁶ (Ka.8.3); avākpuṣpī²⁵⁷ (Vi.8.151; Ci.7.114; 14.234; 29.62); avarohā²⁵⁸ (Ci.3.267); avyathā²⁵⁹ (Sū.4.18; Śā.8.20 and 58); bahulā²⁶⁰ (Ci.8.103); bahuphenarāśā²⁶¹ (Ka. 11.3); balābhaka²⁶² (Ci.23.11); balbaja²⁶³ (Śā.8.41; Ci.1.4.7; 5.138); bhadrāparṇī²⁶⁴ (Vi.8.135); bhadraudanī²⁶⁵ (Sū.4.9); bhaṇḍī²⁶⁶ (Sū.27.107); bhāradvājī²⁶⁷ (Sū.4.9; Vi.8.139); bilvāparṇī²⁶⁸ (Sū.27.107); bodhivikṣa²⁶⁹ (Ci.29.158); brhatpattā²⁷⁰ (Ka.9.3); buka²⁷¹ (Ci.30.82); cakramudgaka²⁷² (Sū.21.25); cañcu²⁷³ (Ci.19.32); cāraṇī²⁷⁴ (Ci.9.45); carmakāṣā²⁷⁵ (Ci.23.66); carmasāhvā²⁷⁶ (Ka.11.3); chattra²⁷⁷ (Sū.27.123); cīna²⁷⁸ (Sū.27.14); cīnaka²⁷⁹ (Ni.4.5; 5.6); cirbhāṭa²⁸⁰ (Sū.27.112; Ci. 19.32); cukrikā²⁸¹ (Ci.8.131; 14.199 and 202; 15.89; 24.151); cukrikā²⁸² (Ci.15.114; 24.151); cuñcuparṇikā²⁸³ (Sū.27.100); daṇḍairakā²⁸⁴ (Ci.26.51; Ka.1.25); dardura²⁸⁵ (Sū.27.14); dāruṇiśā²⁸⁶ (Ci.6.40); devatāḍaka²⁸⁷ (Ka.2.3); dhanañjaya²⁸⁸ (Ci.4.75); dhanvayāsa(ka)²⁸⁹ (Sū.4.11 and 14; Ci.3.204 and 207; 4.46; 7.145; 18.178; 21.58; 26.170); dhanvayavāsa²⁹⁰ (Ci.14.186); dhāvanī²⁹¹ (Ci.3.187 and 224); dugdhikā²⁹² (Ci.8.131; 14.198; 21.83; 26.266); dvāradā²⁹³ (Vi.8.139; Ci.1.4.15); dvīpī²⁹⁴ (Vi.8. 135); dvīpikā²⁹⁵ (Ka.1.22); dvīpiśatru²⁹⁶ (Vi.8.135); eḍagaja²⁹⁷ (Sū.3.3, 13, 15; 27.33; Ci.7.93, 103, 113, 126, 127, 160, 161); ekāṣṭhīlā²⁹⁸ (Si.10.23); elāparṇī²⁹⁹ (Vi.8.135); erakā³⁰⁰ (Sū.3.24 and 27; Ci.29.134); gandhana³⁰¹ (Sū.27.14); gandhapālā³⁰² (Ci.23.57); gāndhapriyaṅgu³⁰³ ((Sū.25.40; Śā.8.24; Ci.21.90); garāgarī³⁰⁴ (Ka.2.3; Si.11.12); garmūti³⁰⁵ (Sū.27.18); gaura³⁰⁶ (Sū.27.8 and 13); girimallikā³⁰⁷ (Ka.5.4); gopī³⁰⁸ (Vi.8.135); guḍā³⁰⁹ (Ka.10.8); hāridraka³¹⁰ (Sū.26.84); hastiparṇī³¹¹ (Sū.1. 82); hastiparṇinī (Sū.1.84); hastiśyāmākā³¹² (Sū.27.17); hayagandhā³¹³ (Ci.28.173); hemadugdhā³¹⁴ (Ka.12.23); heman³¹⁵ (Sū.3.29; Ci.11.40; 12.36; 21.74; 24.159; 25.116 and 117); hiṅguparṇī³¹⁶ (Ci.9.57); hiṅgupattrikā³¹⁷ (Ci.9.66); hiṅguśivātikā³¹⁸ (Ci.10.37; 15.109); hintāla³¹⁹ (Ka.1.8); ikṣuvālā³²⁰ (Ci.26.73); ikṣuvālikā³²¹ (Sū. 4.12; 25.49; Ni.4.10; Vi.8.135; Śā.8.29; Ci.2.1.24; Ka.1.25); ikṣvālikā (Ci.11.18); indrā³²² (Ka.7.19); indrāhva³²³ (Ci.14.160); indrāṇī³²⁴ (Ci.21.85 and 90); indrasā- hvā³²⁵ (Ci.6.42); indrayudha³²⁶ (Ci.23.12); jālamālinī³²⁷ (Ci.23.206); jalapippalī³²⁸ (Sū.27.171); japā³²⁹ (Ci.1.3.57); jayā³³⁰ (Ci.9.45); jhiṇṭī³³¹ (Sū.27.18); joṅgaka³³² (Ci.1.4.15); jūrñāhva³³³ (Sū.21.25; 27.18); kākāhvā³³⁴ (Ci.21.90); kākāṇḍa³³⁵ (Sū. 27.34); kalamba³³⁶ (Sū.27.101); kālaṅkataka³³⁷ (Ka.1.25); kālaṅkrta³³⁸ (Vi.8.135); kanaka³³⁹ (Ci.7.74; 23.78); kanakapūṣpī³⁴⁰ (Ci.7.167); kāṇḍīra³⁴¹ (Ci.3.267; Ka. 1.25); kapikacchu³⁴² (Ci.9.80; 11.62; 28.125 and 160); kapolavallī³⁴³ (Vi.8.139); kapotavallī³⁴⁴ (Vi.8.139); karkaṣā³⁴⁵ (Sū.27.97; Vi.8.143); karkatāhvayā³⁴⁶ (Ka.7. 18); karkatāki³⁴⁷ (Ci.18.51 and 153); karkotāki³⁴⁸ (Ka.4.3); karṇikāra³⁴⁹ (Ka.8.3); kāṣṭhagodhā³⁵⁰ (Ci.1.4.7); kaṭambharā³⁵¹ (Ci.9.47); kaṭuphalā (Ci.23.66; 352 Ka.4. 3); 353 kauntī³⁵⁴ (Ci.9.35; 12.65; 23.55; Si.8.13); kāyasthā³⁵⁵ (Ci.9.46 and 57; 10.46 and 48; 17.141; 26.83); kelūṭa³⁵⁶ (Sū.27.114); khaṇḍikā³⁵⁷ ((Sū.27.28); kharāhvā³⁵⁸ (Sū.23.15; 27.172; Ci.14.43); kharāśvā³⁵⁹ (Ci.26.60; Si.9.8); kilima³⁶⁰ (Vi.8.142; Śā.8.34 and 41; Ka.7.15); kokanada³⁶¹ (Vi.6.17); kolavallī³⁶² (Ci.3.210); koṣātaka³⁶³ (Ka.6.9; Si.3.56); koṭhaphala³⁶⁴ (Si.11.12); koṭhaphalā³⁶⁵ (Ka.4.3); krauñca³⁶⁶ (Ci.23.11); krauñcādāna³⁶⁷ (Sū.27.116; Ci.3.258; 14.9); kṛmihara³⁶⁸ (Ci.7.153); kṛṣṇacitraka (Ci.26.272); kṛṣṇapīṇḍita³⁶⁹ (Ci.26.272); kṛṣṇaśaireyaka³⁷⁰ (Ci.26.268);

16.28 and 121; 20.42; 26.224);⁵⁹³ mrttikā (Sū.14.46; Ci.1.2.11; 1.4.21; 2.4.26; 4.66; 16.27 and 117; 19.65; 27.49, 51, 54; Ka.1.9);⁵⁹⁴ pāṃśu (Vi.3.7; 1.12.28; Ci.1.4.59; 23.39 and 174); pāṣāṇa (Sū.14.26 and 58; 27.209 and 210; Ci.21.131);⁵⁹⁵ rasa (Ci.7. 71);⁵⁹⁶ rasottama (Ci.25.116);⁵⁹⁷ romaśa (Ci.29.152);⁵⁹⁸ saugandhika (Sū.3.10);⁵⁹⁹ saurāṣṭrī (Ci.7.114; 15.138);⁶⁰⁰ saurāṣṭrikā (Ci.30.79 and 98);⁶⁰¹ śilāhvaya (Ci.1.3.65; 26.99);⁶⁰² śilājatu⁶⁰³ (Sū.21.24; 24.56; Ci.1.3.48, 56, 58, 62; 5.97; 7.72; 13.152 and 153; 16.88; 23.213; 28.242; 29.159);⁶⁰⁴ sphaṭika (Ci.1.4.22; 17.125);⁶⁰⁵ suvarcikā (Sū.2.23);⁶⁰⁶ suvarṇamāksika (Ci.7.71);⁶⁰⁷ svarjikā (Vi.7.17; Ci.23.215);⁶⁰⁸ tāpya (Ci.16.78; 26.250);⁶⁰⁹ tuttha (Sū.3.12; Ci.7.108, 114 and 120; 26.250);⁶¹⁰ vaigandhika (Ci.23.223);⁶¹¹ veśmadhūma (Ci.26.14).⁶¹²

This survey may be useful in facilitating an assessment of the employment of inorganic substances in the *Carakasamhitā*⁶¹³ and comparisons with other texts.⁶¹⁴

The inorganic substances mentioned are prescribed in various forms, both externally and internally.⁶¹⁵ Some of these substances were heated before use.⁶¹⁶ Many of them were administered in the form of a powder (cūrṇa, rajas),⁶¹⁷ either singly or in combination with other drugs.

The intricate processes known from alchemical and later āyurvedic treatises are absent from the *Carakasamhitā*,⁶¹⁸ though some are convinced that distillation is mentioned.⁶¹⁹ The term bhasman is employed in a sense that differs from its alchemical use.⁶²⁰

Mercury is not yet known as a medicinal substance. The term rasa⁶²¹ (Ci.7.71) refers back to the juice extracted (nighṛta) from the plant called jāti (Ci.7.70).⁶²²

A substance called rasottama, sometimes thought to be mercury,⁶²³ is prescribed once, for external use in a lepa (Ci.25.116).⁶²⁴

The meaning of this term is a problematic issue. The presence of the verse that contains the prescription in a number of treatises gives the opportunity to compare the interpretations of various commentators. Cakra says that rasottama is either pārada (mercury) or ghee. Indu regards it as mercury (pārada). Among the commentators on the *Hṛdaya*, Aruṇadatta is silent, while the *Kairālī* agrees with Indu; Śivadāśasena, though identifying rasottama as pārada, adds that some are of the opinion that ghee is meant. The *Hṛdayaprakāśa* of the *Aṣṭāṅgahṛdayakośa* records that ghee is meant, though many (predecessors) identify rasottama as pārada. The *Śivadīpikā* considers it to be rasāñjana. The *Kusumāvalī* on the *Siddhayoga* remarks that rasottama is either pārada or ghee according to Cakra (pāṇidatta), or the juice (rasa) of sahakāra (i.e., the mango) according to Jinadāsa. Śivadāśasena comments (ad *Cakradatta*, vṛaṇāsotha 101) that rasottama is pārada, while others regard it as ghee. Niścalakara mentions that Cakra sees ghee in it, while Jinadāsa interprets it as the sweet juice of sahakāra; he himself is convinced that ghee is meant, because this is the substance corresponding to rasottama in an equivalent recipe of Jātūkarna quoted by him.

This survey of the various interpretations makes clear that it is far from certain, even improbable, that mercury is mentioned in the *Carakasamhitā*.

The more sober view that the *Kāśikāvṛtti* and a number of Purāṇas refer to the Vedic school called Carakaśākhā, without postulating any connection with the *Carakasamhitā*, is also represented.⁸⁴ The Carakas of this śākhā are, for example, mentioned in Viśvarūpa's commentary on the *Yājñavalkyasmṛti*.⁸⁵

It is not clear which Caraka is meant in a passage of Jayantabhaṭṭa's *Nyāyamañjarī*,⁸⁶ where Caraka and others are described as able to reach a decision, by means of perception (pratyakṣa), on the power (śakti) of substances (padārtha), either combined or single (samastavyasta), relative to the variability of country, time, the individual (puruṣa), and the stage of the life cycle (daśā).⁸⁷

The Caraka mentioned by Śāntarakṣita is undoubtedly the Caraka of the samhitā.⁸⁸

Some passages of Vedic texts which mention a Caraka or use related words are subject to disagreeing interpretations. The Carakācārya of the *Taittirīyabrāhmaṇa* is, according to Sāyaṇa's commentary, someone who teaches the art of walking on bamboo stilts (vaṃśāgranartana),^{88a} i.e., a kind of dancer (naṭaviśeṣa); this explanation, pointing to a person of a low social status, is accepted by the Gulabkunverba team and Hemarājaśarma,⁸⁹ while others prefer to see in this Carakācārya a teacher of the Carakaśākhā.⁹⁰ The *Vājasaneyisamhitā* is, like the *Taittirīyabrāhmaṇa*, acquainted with a Carakācārya who is enumerated among the victims at the human sacrifice called puruṣamedha; this person is regarded as a teacher of the Carakaśākhā, denounced as the representative of a rival school,⁹¹ as a person of low status,⁹² a roaming mendicant (bhikṣu),⁹³ or the medical authority Caraka.⁹⁴

The form of the Sautrāmaṇī ritual called Carakā, usually thought to be connected with the Carakaśākhā, was supposed by A. Hillebrandt to allude to the medical teacher Caraka.⁹⁵

Other references also show that Caraka is a well known name in Vedic literature.

The Carakas formed one of the schools (śākhā) of the Black Yajurveda⁹⁶ and are subdivided into twelve ramifications in the *Caranavyūha*,⁹⁷ one of the Paśiṣṭas of the *Atharvaveda*. One of the recensions of the Black Yajurveda, the *Kāthakasamhitā*, may be connected with the Carakas⁹⁸ and be based on an older and lost *Carakasamhitā*,⁹⁹ because the Kātha school called itself Carakakāṭha¹⁰⁰ or Cārāyaṇīyakaṭha in order to distinguish it from the school of the Kapiṣṭhalakāṭhas. The precise extent of the term Caraka is, however, uncertain and it may have been applied to the whole or part of the Black Yajurveda.¹⁰¹

The Carakaśākhā was opposed to the *Taittirīyāśākhā* of the Black Yajurveda,¹⁰² and, to a still greater extent, to the schools of the White Yajurveda, represented by the *Vājasaneyisamhitā*.¹⁰³

One passage from the *Taittirīyasamhitā* has become the starting point of brisk discussions about a possible relationship between the Carakaśākhā and the practice of medicine. This passage¹⁰⁴ censures the twin healing gods, the Aśvins, as impure beings because they are physicians who roam about (cara) in the human world; a brāhmaṇa should therefore not practise medicine.

J. Filliozat has argued that the use of the term cara is a shot at the rival school of the Carakas,¹⁰⁵ who have not inserted anything similar in their samhitās, the *Kāthaka-* (27.4), *Kapiṣṭhalakāṭha-* and *Maitrāyaṇīsamhitā*, which relate a similar story about the

great divine sages (devarṣi), the science of medicine came down from the gods to the human world, to the king of Benares; it was called the divine Brāhma system.³⁶

The biography of G-yu-thog yon-tan mgon-po mentions six systems of medicine: the system of binding diseases by spells, which belongs to the Asuras, the *Gso-dpyad hbum-pa* of Brahmā, the Bodhisattva system, laid down in a text called the Mercy of self-release, the *Ca-ra-ka sde-brgyad* of the ṛṣis, the *Mahādevatantra* of the non-Buddhists, and the *Rigs-gsum mgon-po rgyud* of the Buddhists.

Other Tibetan medical works referring to Caraka are the *Dpag-bsam ljon bzan* of Sum-pa mkhan-po,³⁷ the *Mkhas-paḥi dgaḥ-ston* of Chos-rgyal don-grub,³⁸ Jayapaṇḍita's biography of G-yu-thog-pa in the *Thob-yig*,³⁹ and the *Śes-bya kun-khyab* of Hjam-mgon koñ-sprul blo-gros mthaḥ-yas.⁴⁰

Chapter 13

Authorities associated with the Carakasamhitā

Atri

Atri¹ is the name of a priestly family already found in Vedic literature. Many hymns of the *R̥gveda*, in particular of maṇḍala five, are attributed to the Atris and members of their family, the Ātrayas.² A number of myths about an individual seer called Atri are referred to in the *R̥gveda*, *Atharvaveda* and some Brāhmaṇas. One of these myths tells that the Aśvins saved him from a burning pit;³ once, the Aśvins are said to have made him young again.⁴

Atri is a well known sage in many branches of Sanskrit literature. He is often mentioned in the epics, Purāṇas, etc.⁵ He belongs to the group of seven seers (saptarṣi),⁶ and is one of the lords of created beings (Prajāpati).⁷

Atri's name is connected with a number of sciences,⁸ such as dharmaśāstra,⁹ jyotiṣa,¹⁰ vāstuśāstra,¹¹ and medicine.

Medical authors and works referring to or quoting Atri are: the *Bṛhannighaṇṭura-nākara*,¹² *Carakasamhitā*,¹³ *Haṃsarājānīdāna*, *Hārītasamhitā*,¹⁴ *Kāśyapasamhitā*,¹⁵ *Lakṣmaṇotsava*, Nṛsiṃhabhaṭṭa's *Tāmbūlakaipasaṃgraha*, Pālākāpya's *Hastyāyurveda*,¹⁶ Aśubodha and Nityabodha Senagupta in their commentary on the *Rasaratna-samuccaya*,¹⁷ Śivadāsaśena,¹⁸ Tōḍara,¹⁹ Vāgbhaṭa's *Aṣṭāṅghradayavaiḍūryakabhāṣya* and *Aṣṭāṅgasamgraha*,²⁰ Vāṇeśvara Bhaṭṭācārya's *Rasaratnadīpikā*,²¹ Vāsudeva's *Vāsudevānubhava*, Viśvanātha Dvivedī's *Rasendrasambhava*,²² and the *Yogarātnākara*.²³

Vāsudeva's *Vāsudevānubhava* mentions among its sources, next to Atri, a *Bṛhad-atri* and *Laghvatri*. These works are reminiscent of similar versions of the *Ātreya-samhitā* (= *Hārītasamhitā*).²⁴

An *Atrisamhitā* is referred to or quoted in Baladeva Prasāda Misra's *Āyurvedacintāmaṇi*,²⁵ Jīvānandavidyāsāgara's commentary on the *Rasendrasārasamgraha*,²⁶ Raṅgajyotiṛvid's *Vicārasudhākara*,²⁷ and the commentary of Aśubodha and Nityabodha Senagupta on the *Rasaratnasamuccaya*.²⁸

Quotations from Atri and the *Atrisamhitā* may actually be from the *Hārītasamhitā*.²⁹

Noteworthy features of these quotations and references are: an *Atrisamhitā* is mentioned, occasionally next to an *Ātreya-samhitā*; Atri takes the place of Ātreya in some traditions about the origin of āyurveda; Atri is identified with Kṛṣṇātreya; some recipes are attributed to him; a definition of a drug action (saṃśamana) and descriptions of yantras (and a puṭa) are ascribed to him; he is interested in elephantology.

its contents fully agree with verses which do form part of its text (Ca.Ci.3. 53cd–61ab). Probably, Vāgbhaṭa summarized the essence of what he knew to be the opinion expressed in the *Carakasamhitā*; however, one cannot exclude that he was acquainted with a view traditionally ascribed to Agniveśa. This does not mean at all that the evidence collected from Vāgbhaṭa's works proves that the *Agniveśatantra* was available to him.

G. Mukhopadhyaya's allegation that Agniveśa's work still existed when the old *Sauśrutatantra* was redacted by Nāgārjuna and became known as the *Suśrutasaṃhitā*,²²⁶ rests on very slender evidence. The *Suśrutasaṃhitā* does not mention Agniveśa's name; it only refers to the treatises of the six kāyacikitsā specialists²²⁷ and several other groups of experts, used in the composition of the *Uttaratantra* (Su.U.1.4cd–8ab); this is a statement of the same type as that found at the beginning of Vāgbhaṭa's works.

The claim of many Indian authors that the *Agniveśatantra* remained accessible for many centuries, up to the times of Cakrapāṇidatta, Vijayarakṣita, Śrīkaṇṭhadatta and Śivadāsaśena,²²⁸ is not supported by solid evidence;²²⁹ it rests on the shaky basis of the uncritical acceptance of the genuineness of the quotations and on the conviction that the occurrence of these quotations means that MSS containing the complete text were still extant. Acknowledgment of the additional quotations found in Tōḍara's *Āyurvedasaukhya* and Anantakumāra's *Yogarātnasamuccaya*, neglected by the majority of Indian authors or unknown to them, would oblige them to raise the limit of the period in which the *Agniveśatantra* could be consulted. It would, moreover, be hard to explain that in the period of compilation of Tōḍara's *Āyurvedasaukhya* a large body of material from the *Agniveśatantra* could be collected that was overlooked by the commentators on the classical medical treatises.

The majority of the citations referred to by these authors in order to substantiate their claims are of the nature of paribhāṣās; these technical rules belong to a special group of quotations which are probably from an *Agniveśasaṃhitā*, a work that impresses as entirely different from the *Agniveśatantra* and of a later date. Paribhāṣās do not form part of the *Carakasamhitā* and are usually found in the commentarial literature or specialized works like the *Bheṣajakalpa*, attributed to Bharadvāja.

As I have already mentioned, the quotations attributed to Agniveśa belong to several groups. In my opinion it is impossible to decide whether or not some may be from the old *Agniveśatantra*, because of the absence of reliable criteria. No one knows what the *Agniveśatantra* looked like, in spite of assertions to the contrary.²³⁰ P.V. Sharma has advanced the hypothesis that the *Agniveśatantra* was a work in sūtra style, resembling the *Arthaśāstra*; Caraka expanded the text, rewrote the descriptions of the assemblies of sages in the form of dialogues and added the summaries at the end of each chapter.²³¹ The same author has tried to isolate elements of the *Carakasamhitā* that in his view belong to its oldest layer, i.e., the *Agniveśatantra*.²³²

The quotations do not support the hypothesis that Agniveśa's work mainly consisted of sūtras; by far the larger part of the citations are in verse.²³³

Peculiarities found in quotations from Agniveśa which throw doubt on their authenticity or point to a date later than Dṛḍhabala's completion of the *Carakasamhitā* are: the use of the term ekarūpa yakṣman for an epidemic disease;²³⁴ the absence of

that Patañjali was known as a medical authority to the authors of a *Yogarātnākara*⁶²⁰ and *Yogarātnasamuccaya*.⁶²¹ Āśubodha and Nityabodha Senagupta reproduce, in their commentary on the *Rasaratnasamuccaya*, some quotations from Patañjali and the *Pātañjala* found in Śivadāsa's commentary on the *Cakradatta*.⁶²²

Satyanārāyaṇaśāstrin's *Padārthavijñāna* also quotes Patañjali and the *pātañjalāḥ*; some of these quotations are, however, from the *Carakasamhitā*.⁶²³ A quotation from the *Pātañjaladarśana* in Yogendranātha's *Āyurvijñānarātnākara* is from the *Yogasūtra*.⁶²⁴

Govindadāsa's *Bhaiṣajyaratnāvalī* contains a recipe attributed to Patañjali.⁶²⁵

The references and quotations in the works of Āśubodha, Govindasena, Kāśīrāma, Niścala, Śivadāsasena and Trivikrama indicate that Patañjali's work dealt with metallurgy (*lohaśāstra*) and its application to medicine. B. Seal claims that Patañjali gave elaborate directions for many metallurgic and chemical processes, especially the preparation of metallic salts, alloys and amalgams, and the extraction, purification and assaying of metals; he adds that it was probably Patañjali who discovered the use of the mixtures called *viḍa*. B. Seal regards Patañjali's *Lohaśāstra* as a later work than that of Nāgārjuna on the same subject, an opinion based on the observation that the former's directions concerning particular processes are more complicated than those of the latter.⁶²⁶

Other medical writings ascribed to Patañjali are a *Vātaskandha* and *Siddhāntasārāvalī*; the latter work incorporates a *Paṭtaskandha*.⁶²⁷

The Indian tradition regards Patañjali as the author of a lost tantra on *rasāyana*.⁶²⁸ Al-Bīrūnī was acquainted with Patañjali's association with *rasāyana*.⁶²⁹

Patañjali is the name of at least two famous authors; the one wrote the *Mahābhāṣya*, the other the *Yogasūtra*.

An interesting development made the two fuse into one Patañjali, who, in addition to his expertise in grammar and yoga, was also credited with a thorough knowledge of medicine and allied subjects.

The medical works already referred to are often attributed to this composite Patañjali, as well as a commentary on the *Carakasamhitā*, Vārttikas on that work, or a revised version of it. As a further complication, he is even considered to be identical with Caraka.

The threefold Patañjali is mentioned as a *pratisaṃskartar* of the *Carakasamhitā* in the introductory verses of Cakrapāṇidatta's *Āyurvedadīpikā*.⁶³⁰ His Vārttikas on the *Vaidyakaśāstra* are referred to in Rāmabhadradīkṣita's *Patañjalicarita*,⁶³¹ written at the end of the seventeenth or the beginning of the eighteenth century.⁶³² The tradition that a Patañjali wrote Vārttikas on the *Carakasamhitā* is endorsed by G. Hāldār, who asserts that Vijayarakṣita, in his part of the *Madhukośa*, quotes one of these Vārttikas,⁶³³ which, after having existed independently, were incorporated in the text of the *Carakasamhitā* in the first century A.D.⁶³⁴ The same author is convinced that one of Patañjali's Vārttikas is cited in Nāgeśabhaṭṭa's (*Vyākaraṇasiddhānta*) *mañjūṣā*.⁶³⁵ The claim that Patañjali made additions to the text of the *Carakasamhitā* was also advanced by Sūramcandra.⁶³⁶ Gaṇanātha Sena⁶³⁷ regarded him, in agreement with Cakrapāṇidatta, as a *pratisaṃskartar* of the *Carakasamhitā*.